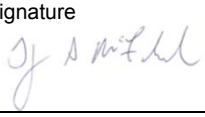
SITE HEALTH AND SAFETY PLAN (*HASP*)

Office:	Cleveland (CLV)
Site Name:	Westover Landfill
Client:	U.S. EPA Region V
Work Location:	820 Otter Creek Rd., Oregon, Lucas County, Ohio
WO#:	20405.012.001.1376.00

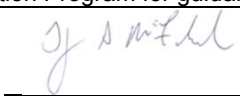
SITE HEALTH AND SAFETY PLAN (HASP)
Including Environmental Protection and Sustainability Program (EPSP) Checklist

Review and Approval Documentation:

Reviewed by: SO/DEHSM/CEHS	Dave Robinson		Date: 4/1/11
	Name (Print)	Signature	
Environmental. Compliance Advisor			Date:
	Name (Print)	Signature	
Approved by: Project Manager			
	TJ McFarland		Date: 3/30/11
	Name (Print)	Signature	

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the FSO and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to CEHS Program Manual Section 5, Personal Protection Program for guidance.)

☒ **FSO**	TJ McFarland		Date: 3/30/11
	Name	Signature	
☐ **Site Manager**			
	Name	Signature	Date:

☒ **Project Environmental Compliance Officer**	**TJ McFarland**	Date: 3/30/11
	Name	
☒ **Dangerous Goods Shipping Coordinator**	**TJ McFarland**	Date: 3/30/11
	Name	

Project start date: 3/4/2011 End date: 9/30/11	This site HASP **must** be r**eissued/reapproved** for any activities conducted after: Date: 3/04/2012	Amendment date(s)	By:
		1.	
		2.	
		3.	
		4.	
		5.	

SITE HEALTH AND SAFETY PLAN (HASP)
Including Environmental Protection and Sustainability Program (EPSP) Checklist

Prepared by: Andrew Ravis	**W.O. Number:** 20405.012.001.1376.00	**Date:** 3/04/2011

Project Identification

Office: CLV

Site Name: Westover Landfill

Client: U.S. EPA Region V

Work Location Address: 820 Otter Creek Road, Toledo, Ohio

Site History: The Site, is approximately 10.5 acres located at 820 Otter Creek Road, Toledo, Lucas County, Ohio is in a mixed industrial, residential and agricultural area. During a prior site inspection on May 3, 2007, Ohio EPA personnel identified actual and potential threats of release of liquid leachate directly into Otter Creek. On August 18-20, 2009, U.S. EPA conducted a site assessment to futher determine threats to human health and the environment. The PRP and PRP contractors are under orders with USEPA to remove contaminated soil from around a discharge pipe that is actively leaking leachate into Otter Creek, cap the pipe, and backfill the excavated area with clean fill material. The PRP and PRP contractors are also under orders from USEPA to begin removing leachate from the landfill's leachate collection system and transporting the leachate to the City of Oregon's POTW for disposal.

Scope of Work: START personnel will be on site to conduct oversight and documentation of PRP contractor activities. START will also conduct air monitoring for CO, H2S, O2, LEL, VOCs, and methane.

☐ Site visit only; site HASP not necessary. List personnel here and sign off below:

Regulatory Status:

Site regulatory status:

CERCLA/SARA	**RCRA**	**Other Federal Agency**
☒ U.S. EPA	☒ U.S. EPA	☐ DOE
☒State	☒ State	☐ USACE
☐ NPL Site	**NRC**	☐ Air Force
☒ OSHA	☐ 10 CFR 20	☐ _____

Hazard Communication (Req'd See Attachment D)
☒ 1910 ☒ 1926 ☐ State

Safety Officer Manual (Required to be On-Site)

Based on the Hazard Assessment and Regulatory Status, determine the Standard HASP(s) applicable to this project. Indicate below which Standard HASP will be used and append the appropriate pages of this form along with the Standard Plan.

☐ Stack Test	☐ _____
☐ Air Emissions	☐ _____
☐ Asbestos	☐ _____
☐ Industrial Hygiene	☐ _____
☐ _____	☐ _____

Review and Approval Documentation:

Reviewed by: SO/DEHSM/CEHS	Dave Robinson (Name Print)	(Signature)	Date: 4/1/11
Environmental. Compliance Advisor	(Name Print)	(Signature)	Date:
Approved by: Project Manager	TJ McFarland (Name Print)	(Signature)	Date: 3/30/11

Hazard Assessment and Equipment Selection:

In accordance with WESTON's Personal Protective Equipment Program and 29 CFR 1910.132, at the site prior to personnel beginning work, the FSO and/or the Site Manager have evaluated conditions and verified that the personal protective equipment selection outlined within this HASP is appropriate for the hazards known or expected to exist. (Refer to CEHS Program Manual Section 5, Personal Protection Program, for guidance.)

☒ **FSO**	TJ McFarland (Name)	(Signature)	Date: 3/30/11
☐ **Site Manager**	(Name)	(Signature)	Date:

☒ **Project Environmental Compliance Officer**	TJ McFarland Name	Date:	3/30/11
☒ **Dangerous Goods Shipping Coordinator**	TJ McFarland Name	Date:	3/30/11

Project start date: 3/04/2011 End date: 9/30/11	This site HASP **must** be r**eissued/reapproved** for any activities conducted after: Date: 3/04/2012	Amendment date(s) 1. 2. 3. 4.	By:

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ATTACHMENTS

1. PERSONNEL ON SITE INFORMATION

1.1 WESTON REPRESENTATIVES

Organization/Branch	Name/Title	Address	Telephone
Weston / CLV	TJ McFarland / Project Manager/FSO	6779 Engle Rd. Suite I, Middleburg Hts., Ohio 44130	440-202-2802
Weston / CLV	Frank Beodray / Project Scientist	6779 Engle Rd. Suite I, Middleburg Hts., Ohio 44130	440-202-2806
Weston / CLV	Ryan Green / Project Scientist	6779 Engle Rd. Suite I, Middleburg Hts., Ohio 44130	440-202-2811

Roles and Responsibilities:

1.2 WESTON SUBCONTRACTORS

Organization/Branch	Name/Title	Address	Telephone
	Name: Title:	Street: City: State, Zip:	
	Name: Title:	Street: City: State, Zip:	
	Name: Title:	Street: City: State, Zip:	

Roles and Responsibilities:

SITE-SPECIFIC HEALTH AND SAFETY PERSONNEL

The Site Field Safety Officer (FSO) for activities to be conducted at this site is: Ryan Green

The FSO has total responsibility for ensuring that the provisions of this Site HASP are adequate and implemented in the field.

Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, the personnel assigned as FSOs are experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120.

Qualifications:
40-hour HAZWOPER + refresher, 8-hour site manager FSO training, CPR and First Aid.

Designated alternates include: TJ McFarland

1.3 SITE PERSONNEL AND CERTIFICATION STATUS

1.3.1 Weston Employee Certification

Name: TJ McFarland **Title: Project Manager, FSO** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)	**Name: Frank Beodray** **Title: Project Scientist** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)
Name: Ryan Green **Title: Project Scientist** **Task(s): ALL** **Certification Level or Description:** ☒Medical Current ☒Training Current ☐Fit Test Current (Qual.) ☒Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐Medical Current ☐Training Current ☐Fit Test Current (Qual.) ☐Fit Test Current (Quant.)
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TRAINING CURRENT - Training: All personnel, including visitors, entering the exclusion or contamination reduction zones must have certifications of completion of training in accordance with OSHA 29 CFR 1910, 29 CFR 1926, or 29 CFR 1910.120.

FIT TEST CURRENT - Respirator Fit Testing: All persons, including visitors, entering any area requiring the use or potential use of any negative pressure respirator must have had, as a minimum, a qualitative fit test, administered in accordance with OSHA 29 CFR 1910.134 or ANSI, within the last 12 months. If site conditions require the use of a full-face, negative-pressure, air-purifying respirator for protection from asbestos or lead, employees must have had a qualitative fit test, administered according to OSHA 29 CFR 1910.1001 or 1025/1926, within the last 6 months.

MEDICAL CURRENT - Medical Monitoring Requirements: All personnel, including visitors, entering the exclusion or contamination reduction zones must be certified as medically fit to work and to wear a respirator, if appropriate, in accordance with 29 CFR 1910, 29 CFR 1926/1910, or 29 CFR 1910.120.

The Site Field Safety Officer is responsible for verifying all certifications and fit tests.

SITE PERSONNEL AND CERTIFICATION STATUS

1.3.2 Subcontractor's Health and Safety Program Evaluation

Name of Subcontractor:
Address:

Activities To Be Conducted by Subcontractor:

Evaluation Criteria

Medical program meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Personal protective equipment available ☐ Acceptable ☐ Unacceptable Comments:	On-site monitoring equipment available, calibrated, and operated properly ☐ Acceptable ☐ Unacceptable Comments:
Safe working procedures clearly specified ☐ Acceptable ☐ Unacceptable Comments:	Training meets OSHA/WESTON criteria ☐ Acceptable ☐ Unacceptable Comments:	Emergency procedures ☐ Acceptable ☐ Unacceptable Comments:
Decontamination procedures ☐ Acceptable ☐ Unacceptable Comments:	General health and safety program evaluation ☐ Acceptable ☐ Unacceptable Comments:	Additional comments: ☐ Subcontractor has agreed to and will conform with the WESTON HASP for this project. ☐ Subcontractor will work under his own HASP, which has been accepted by project PM.

Evaluation Conducted by: Certifications for all subcontractors personnel will be added to the HASP prior to beginning work. **Date:**

Subcontractor

Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)
Name: **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)	**Name:** **Title:** **Task(s):** **Certification Level or Description:** ☐ Medical Current ☐ Training Current ☐ Fit Test Current (Qual.) ☐ Fit Test Current (Quant.)

2. HEALTH AND SAFETY EVALUATION

2.1 HEALTH AND SAFETY EVALUATION

2.1.1 Task Hazard Assessment

Background Review: ☒ Complete ☐ Partial If partial why?

Activities Covered Under This Plan:

No.	Task/Subtask	Description	Schedule
1		**START will perform oversight of contractor operations while work is being performed. Written documentation along with photo documentation and air monitoring will be performed.**	**TBD**

Types of Hazards:

Numbers refer to one of the following hazard evaluation forms. Complete hazard evaluation forms for each appropriate hazard class.

Physiochemical 1

- ☒ Flammable
- ☒ Explosive
- ☒ Corrosive
- ☐ Reactive
- ☐ O_2 Rich
- ☒ O_2 Deficient

Chemically Toxic 1

- ☒ Inhalation ☐ Carcinogen
- ☒ Ingestion ☐ Mutagen
- ☒ Contact ☐ Teratogen
- ☒ Absorption
- ☐ OSHA 1910.1000 Substance (Air Contaminants)
- ☐ OSHA Specific Hazard Substance Standard (Refer to following page for listing)

Radiation 3

Ionizing:

- ☐ Internal exposure
- ☐ External exposure

Non-ionizing:

- ☒ UV ☐ IR
- ☐ RF ☐ MicroW
- ☐ Laser

Biological 2

- ☐ Etiological Agent
- ☒ Other (plant, insect, animal)

Physical Hazards 4

- ☐ Physical Hazards 4
- ☒ Construction Activities

Source/Location of Contaminants and Hazardous Substances:

Directly Related to Tasks

- ☒ Air
- ☐ Other Surface
- ☐ Groundwater
- ☒ Soil
- ☒ Surface Water
- ☐ Sanitary Wastewater
- ☐ Process Wastewater
- ☒ Other **Leachate**

Indirectly Related to Tasks — Nearby Process(es) That Could Affect Team Members:

- ☒ Client Facility/WESTON Work Location
- ☐ Nearby Non-Client Facility

Describe:

☒ Have activities (task[s]) been coordinated with facility?

Comments:

HEALTH AND SAFETY EVALUATION

2.1.2 Chemical Hazards of Concern

☐ **N/A**

Chemical Contaminants of Concern

Attach data sheets from an acceptable source such as NIOSH pocket guide, condensed chemical dictionary, ACGIH TLV booklet, etc. List chemicals and concentrations below and locate data sheets in Attachment A of this HASP.

☐ **N/A**

Identify hazardous materials used or on-site and attach Material Safety Data Sheets (MSDSs) for all reagent type chemicals, solutions, or other identified materials that in normal use in performing tasks related to this project could produce hazardous substances. Ensure that all subcontractors and other parties working nearby are informed of the presence of these chemicals and the location of the MSDSs. Obtain from subcontractors and other parties, lists of the hazardous materials they use or have on-site and identify location of the MSDSs here. List chemicals and quantities below and locate MSDSs in Attachment B of this HASP.

Chemical Name	Concentration	Chemical Name	Quantity
Methane (at the discharge pipe)	**57,000 ppm**	**Calibration Gas (GME2000, MultiRAE)**	**3 x 34L**
Arsenic (in the leachate)	**52 ug/L**		
Cadmium (in the leachate)	**6 ug/L**		
Chromium (in the leachate)	**480 ug/L**		
Lead (in the leachate)	**95 ug/L**		

OSHA-SPECIFIC HAZARDOUS SUBSTANCES

☐ 1910.1001 Asbestos	☐ 1910.1002 Coal tar pitch volatiles	☐ 1910.1003 4-Nitrobiphenyl, etc.	☐ 1910.1004 alpha-Naphthylamine
☐ 1910.1005 [Reserved]	☐ 1910.1006 Methyl chloromethyl ether	☐ 1910.1007 3,3'-Dichlorobenzidine (and its salts)	☐ 1910.1008 bis-Chloromethyl ether
☐ 1910.1009 beta-Naphthylamine	☐ 1910.1010 Benzidine	☐ 1910.1011 4-Aminodiphenyl	☐ 1910.1012 Ethyleneimine
☐ 1910.1013 beta-Propiolactone	☐ 1910.1014 2-Acetylaminofluorene	☐ 1910.1015 4-Dimethylaminoazobenzene	☐ 1910.1016 N-Nitrosodimethylamine
☐ 1910.1017 Vinyl chloride	☐ 1910.1018 Inorganic arsenic	☐ 1910.1025 Lead (Att. FLD# 46)	☐ 1910.1026 Chromium VI (att. FLD 53)
☐ 1910.1027 Cadmium (Att. 50 FLD)	☐ 1910.1028 Benzene (Att. FLD# 54 or 61)	☐ 1910.1029 Coke oven emissions	☐ 1910.1043 Cotton dust
☐ 1910.1044 1,2-Dibromo-3-chloropropane	☐ 1910.1045 Acrylonitrile	☐ 1910.1047 Ethylene oxide	☐ 1910.1048 Formaldehyde
☐ 1910.1050 Methylenedianiline	☐ 1910.1051 1,3 Butadiene	☐ 1910.1052 Methylene chloride	☐ 1926.60 Methylenedianiline
☐ 1926.62 Lead	☐ 1926.1101 Asbestos (Att. FLD 52)	☐ 1926.1127 Cadmium	

HEALTH AND SAFETY EVALUATION

2.1.3 Biological Hazards of Concern

☒ **Poisonous Plants** (FLD 43-D) Location/Task No(s) Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☒ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No	☒ **Insects** (FLD 43-B) Location/Task No(s) Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No
☒ **Snakes, Reptiles** (FLD 43-A) Location/Task No(s) Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No	☒ **Animals** (FLD 43-A) Location/Task No(s) Source: ☐ Known ☒ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☒ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No
FLD 43 — WESTON Biohazard Field Operating Procedures: Att. OP ☐	
☐ **Sewage** Location/Task No(s).: Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No Tetanus Vaccination within Past 10 yrs: ☐ Yes ☐ No	☐ **Etiologic Agents** (FLD –C)**(List)** Location/Task No(s).: Source: ☐ Known ☐ Suspect Route of Exposure: ☐ Inhalation ☐ Ingestion ☐ Contact ☐ Direct Penetration Team Member(s) Allergic: ☐ Yes ☐ No Immunization required: ☐ Yes ☐ No
FLD 43-C — Mold and Fungus. Att. OP ☐	
FLD 44 — WESTON Bloodborne Pathogens Exposure Control Plan – First Aid Procedures: Att. OP ☒	
FLD 45 — WESTON Bloodborne Pathogens Exposure Control Plan – Working with Infectious Waste: Att. OP ☐	

HEALTH AND SAFETY EVALUATION

2.1.4 Radiation Hazards of Concern

NONIONIZING RADIATION

Task No.	Type of Nonionizing Radiation	Source On-Site	TLV/PEL	Wavelength Range	Control Measures	Monitoring Instrument
All	Ultraviolet	Solar			Appropriate clothing/ sunscreen	None
	Infrared	N/A				
	Radio Frequency	N/A				
	Microwave	N/A				
	Laser	N/A				

IONIZING RADIATION

Task No.	Radionuclide	Major Radiations	Radioactive Half-Life (Years)	DAC (µCii/mL)			Surface Contamination Limit	Monitoring Instrument
				D	W	Y		

HEALTH AND SAFETY EVALUATION

2.1.5 Physical Hazards of Concern

Physical Hazard Condition	Physical Hazard	Attach OP	WESTON OP Titles
Loud noise	Hearing loss/disruption of communication	☒	Section 7.0 - ECH&S Program Manual Occupational Noise & HC Program
Inclement weather	Rain/humidity/cold/ice/snow/lightning	☒	FLD02 - Inclement Weather
Steam heat stress	Burns/displaced oxygen/wet working surfaces	☐	FLD03 - Hot Process - Steam
Heat stress	Burns/hot surfaces/low pressure steam	☐	FLD04 - Hot Process - LT3
Ambient heat stress	Heat rash/cramps/exhaustion/heat stroke	☒	FLD05 - Heat Stress Prevention/Monitoring
Cold stress	Hypothermia/frostbite	☒	FLD06 - Cold Stress
Cold/wet	Trench/paddy/immersion foot/edema	☐	FLD02 - Inclement Weather
Confined spaces	Falls/burns/drowning/engulfment/electrocution	☐	FLD08 - Confined Space Entry
Industrial Trucks	Fork Lift Truck Safety	☐	FLD09 – Powered Industrial Trucks
Improper lifting	Back strain/abdomen/arm/leg muscle/joint injury	☒	FLD10 - Manual Lifting/Handling Heavy Objects
Uneven surfaces	Vehicle accidents/slips/trips/falls	☒	FLD11 - Rough Terrain
Poor housekeeping	Slips/trips/falls/punctures/cuts/fires	☒	FLD12 - Housekeeping
Structural integrity	Crushing/overhead hazards/compromised floors	☐	FLD13 - Structural Integrity
Improper cylinder. handling	Mechanical injury/fire/explosion/suffocation	☒	FLD16 - Pressure Systems - Compressed Gases
Water hazards	Poor visibility/entanglement/drowning/cold stress	☐	FLD17 - Diving
Water hazards	Drowning/heat/cold stress/hypothermia/falls	☐	FLD18 - Operation and Use of Boats
Water hazards	Drowning/frostbite/hypothermia/falls/electrocution	☐	FLD19 - Working Over Water
Vehicle hazards	Struck by vehicle/collision	☒	FLD20 - Traffic
Explosions	Explosion/fire/thermal burns	☐	FLD21 - Explosives
Moving mechanical parts	Crushing/pinch points/overhead hazards/electrocution	☒	FLD22 – Earth Moving Equipment
Moving mech. parts	Overhead hazards/electrocution	☐	FLD23 – Cranes, Rigging, and Slings
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD24 - Aerial Lifts/Man lifts
Working at elevation	Overhead hazards/falls/electrocution	☐	FLD25 - Working at Elevation
Working at elevation	Overhead hazards/falls/electrocution/slips	☐	FLD26 - Ladders
Working at elevation	Slips/trips/falls/overhead hazards	☐	FLD27 - Scaffolding
Trench cave-in	Crushing/falling/overhead hazards/suffocation	☒	FLD28 - Excavating/Trenching
Physiochemical	Explosions/fires from oxidizing, flam./corr. material	☐	FLD30 - Hazardous Materials Use/Storage
Physiochemical	Fire and explosion	☒	FLD31 - Fire Prevention/Response Plan Required
Physiochemical	Fire	☒	FLD32 - Fire Extinguishers Required
Structural integrity	Overhead/electrocution/slips/trips/falls/fire	☐	FLD33 - Demolition
Electrical	Electrocution/shock/thermal burns	☐	FLD34 - Utilities
Electrical	Electrocution/shock/thermal burns	☐	FLD35 - Electrical Safety
Burns/fires	Heat stress/fires/burns	☐	FLD36 - Welding/Cutting/Brazing/Radiography
Impact/thermal	Thermal burns/high pressure impaction/heat stress	☐	FLD37 - Pressure Washers/Sand Blasting
Impaction/electrical	Smashing body parts/pinching/cuts/electrocution	☒	FLD38 - Hand and Power Tools
Poor visibility	Slips/trips/falls	☐	FLD39 - Illumination
Fire/explosion	Burns/impaction	☐	FLD40 - Storage Tank Removal/Decommissioning
Communications	Disruption of communications	☒	FLD41 - Std. Hand/Emergency Signals
Energy/release	Unexpected release of energy	☐	FLD42 - Lockout/Tag-out
Biological Hazards	Biological Hazards at site	☐	FLD43 - Biological Hazards
Animals	Animals	☒	FLD43A - Animals
Insects	Stinging and Biting Insects	☒	FLD43B - Stinging and Biting Insects
Molds/Fungi	Molds and Fungi	☐	FLD43C - Molds and Fungi
Hazardous Plants	Hazardous Plants	☒	FLD43D - Hazardous Plants
Etiologic Agents	Etiologic Agents	☐	FLD43E - Etiologic Agents

2.1.5 Physical Hazards of Concern (Continued)

Physical Hazard Condition	Physical Hazard	Attach OP	WESTON OP Titles
Biological Hazards/BBP	Biological Hazards/BBP at site/First Aid Providers	☐	FLD44 - Biological Hazards – Bloodborne Pathogens Exposure Control Plan – First Aid Providers
Infectious Waste	Infectious Waste at site/BBP/ at site/Infectious Waste	☐	FLD45 – Biological Hazards – Bloodborne Pathogens Exposure Control Plan – Work With Infectious Waste
Lead Contaminated sites	Lead poisoning	☐	FLD46 - Control of Exposure to Lead
Puncture/cuts	Cuts/ dismemberment/gouges	☐	FLD47 - Clearing, Grubbing and Logging Operations
Not applicable	Not applicable	☐	FLD48 – Federal, State, Local Regulatory Agency Inspections
Not applicable	Exposure to hazardous materials/waste	☐	FLD49 – Safe Storage of Samples
Cadmium	Exposure Control	☐	FLD50 – Cadmium Exposure Control Plan
Process Safety Procedure	Safety Procedure	☐	FLD51 – Process Safety Procedure
Asbestos	Asbestos Exposure	☐	FLD52 – Asbestos Exposure Control Plan
Hexavalent Chromium	Exposure Control Plan	☐	FLD53 – Hexavalent Chromium Exposure Control Plan
Benzene	Exposure Control Plan	☐	FLD54 - Benzene Exposure Control Plan
Hydrofluoric acid	Working with HF	☐	FLD55 – Working with Hydrofluoric Acid
Moving drill rig parts	Crushing/pinch points/overhead hazards/electrocution	☐	FLD56 – Drilling Safety
Vehicles/driving	Accidents,/fatigue/cell phone use	☒	FLD 57 – Motor Vehicle Safety
Improper material handling	Back injury/crushing from load shifts/equipment/tools	☐	FLD 58 – Drum Handling Operations
COC decontamination	COCs/slip,trip, and falls/waste generation/environmental compliance/PPE	☐	FLD59 - Decontamination
Drilling hazards	Electrocution/overhead hazards/pinch points	☐	Environmental Remediation Drilling Safety Guideline - 2005
Fatigue	Long work hours	☐	FLD60 – Employee Duty Schedule
Benzene/Gasoline	Benzene exposure	☐	FLD61 – Gasoline Contaminant Exposure
Cardiac Arrest	Accident/Heart Attack	☐	FLD62 – 2009 Automatic External Defibrillator (AED) Program Guidelines
Ionizing Radiation	Ioninaing Radiation	☐	FLD63 – Using Handheld X-Ray Fluorescence (XRF) Analyzers
Working Alone	Isolated Working Conditions	☐	FLD64 – Employees Working Alone

3. TASK BY TASK ASSESMENT

3.1 TASK-BY-TASK RISK ASSESSMENT

3.1.1 Task 1 Description

TASK 1: START will perform oversight of contractor operations while work is being performed. Writen documentation along with photo documentation and air monitoring will be performed.

EQUIPMENT REQUIRED/USED

Hard Hat	**Steel Toe Boots**	**Safety Glasses**	**Traffic Safety Vest**
Logbook	**Digital Camera**		
PID	**FID**		

POTENTIAL HAZARDS/RISKS

Chemical

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

START will observe and document the landfill contractor operations at distance, upwind of any operations. START will monitor the work zone and the PRP contractor's breathing zone with a PID and FID. If measured concentrations exceed the action levels established for the project, work will be stopped and additional monitoring and/or upgrade of PPE will be initiated.

Physical

☒ Hazard Present Risk Level: ☐ H ☒ M ☐ L

What justifies risk level?

Working on slopes and uneven ground, with possible dense vegetation.

Biological

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

Insects, rodents and other vermin may be present on site.

RADIOLOGICAL

☒ Hazard Present Risk Level: ☐ H ☐ M ☒ L

What justifies risk level?

No ionizing radiation sources have been reported or suspected at the site.

LEVELS OF PROTECTION/JUSTIFICATION

Level D: START will observe and document the landfill contractor operations at distance, upwind of any operations. START will monitor their personal breathing zone for VOCs, CO, H2S, O2, LEL, and Methane.

SAFETY PROCEDURES REQUIRED AND/OR FIELD OPS UTILIZED

All work will be performed in accordance with the provisions of this HASP, OSHA guidelines, and WESTON Standard Operating Procedures.

2,5,6,10,11,12,16,20,22,31,32,38,41,57

3.2 PERSONNEL PROTECTION PLAN

Engineering Controls
Describe Engineering Controls used as part of Personnel Protection Plan:

Task(s)	
All	NA

Administrative Controls
Describe Administrative Controls used as part of Personnel Protection Plan:

Task(s)	
All	START personnel will remain at a safe distance from the PRP and PRP contractor's operations and equipment.

Personal Protective Equipment
Action Levels for Changing Levels of Protection. Refer to Site Air Monitoring Program—Action Levels. Define Action Levels for up or down grade for each task:

Task(s)	
All	Level D PPE

Description of Levels of Protection

Level D	Level D Modified	
Task(s):	**Task(s**): All	
☐ Head	☒ Head	Hard hat
☐ Eye and Face	☒ Eye and Face	Safety glasses
☐ Hearing	☐ Hearing	
☐ Arms and Legs Only	☐ Arms and Legs Only	
☐ Appropriate Work Uniform	☐ Whole Body	
☐ Hand – Gloves	☐ Apron	
☐ Foot - Safety Boots	☐ Hand - Gloves	
☐ Fall Protection	☒ Gloves	Nitrile gloves
☐ Flotation	☐ Gloves	
☐ Other	☒ Foot - Safety Boots	Stell toe boots
	☒ Over Boots	Rubber booties

3.3 DESCRIPTION OF LEVELS OF PROTECTION

Level C		Level B
Task(s): All		**Task(s):**
☒ Head	Hard hat	☐ Head
☒ Eye and Face	Full face APR	☐ Eye and Face
☐ Hearing		☐ Hearing
☐ Arms and Legs Only		☐ Arms and Legs Only
☐ Whole Body		☐ Whole Body
☐ Apron		☐ Apron
☐ Hand – Gloves		☐ Hand - Gloves
☒ Gloves	Nitrile gloves	☐ Gloves
☐ Gloves		☐ Gloves
☒ Foot - Safety Boots	Steel toe boots	☐ Foot - Safety Boots
☒ Outer Boots	Rubber booties	☐ Outer Boots
☐ Boots (Other)		☐ Boots (Other)
☐ Half Face		☐ SAR - Airline
☐ Cart./Canister		☐ SCBA
☒ Full Face		☐ Comb. Airline/SCBA
☒ Cart./Canister	GMC-P100 or GME-P100	☐ Cascade System
☐ PAPR		☐ Compressor
☐ Cart./Canister		☐ Fall Protection
☐ Type C		☐ Flotation
☐ Fall Protection		☐ Other
☐ Flotation		
☐ Other		

4. MONITORING PROGRAM

4.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

4.1.1 Air Monitoring Instruments

Instrument Selection and Initial Check Record

Reporting Format: ☒ **Field Notebook** ☐ **Field Data Sheets*** ☐ **Air Monitoring Log** ☐ **Trip Report** ☐ **Other**

Instrument	Task No.(s)	Number Required	Number Received	Checked Upon Receipt	Comment	Initials
☐ **RAD**				☐		
☐ GM (Pancake)				☐		
☐ NaI (Micro R)				☐		
☐ ZnS (Alpha Scintillator)				☐		
☐ Other _____				☐		
☒ **PID**				☐		
☐ MiniRAE				☐		
☒ MultiRAE (LEL/O2/H2S/CO/PID)	All	1		☐		
☐ TVA 1000 (PID/FID)				☐		
☐ Other _____				☐		
☒ **FID**						
☒ TVA 1000 (FID/PID)	All	1		☐		
☐ Other _____				☐		
☐ **PDR 1000 (Particulate)**				☐		
☒ **Single Gas Meter (SGM)**				☐		
Specify Chemical: GEM 2000 for Methane	All	1		☐		
☐ **Personal Sampling Pump**				☐		
Specify Media:				☐		
☐ Bio-Aerosol Monitor				☐		
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						
☐ Tubes/type: _____						

4.1 SITE OR PROJECT HAZARD MONITORING PROGRAM

4.1.1 Air Monitoring Instruments Calibration Record

Instrument, Mfg., Model, Equip. ID No.	Date	Time	Calib. Material	Calib. Method Mfg.'s	Other	Initial Setting and Reading	Final Setting and Reading	Calibrator's Initials

4.2 SITE AIR MONITORING PROGRAM

Action Levels

These Action Levels, if not defined by regulation, are some percent (usually 50%) of the applicable PEL/TLV/REL. That number must also be adjusted to account for instrument response factors.

	Tasks	Action Level		Action
☒ **Explosive atmosphere**	All	Ambient Air Concentration	Confined Space Concentration	
		<10% LEL	0 to 1% LEL	Work may continue. Consider toxicity potential.
		10 to 25% LEL	1 to 10% LEL	Work may continue. Increase monitoring frequency.
		>25% LEL	>10% LEL	Work must stop. Ventilate area before returning.
☒ **Oxygen**	All	Ambient Air Concentration	Confined Space Concentration	
		<19.5% O_2	<19.5% O_2	Leave area. Re-enter only with self-contained breathing apparatus.
		19.5% to 25% O_2	19.5% to 23.5% O_2	Work may continue. Investigate changes from 21%.
		>25% O_2	>23.5% O_2	Work must stop. Ventilate area before returning.
☐ **Radiation**		< 3 times background		Continue work.
		3 times background to < 1 mR/hour		Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible radiation source(s) present. Continue investigation with caution. Perform thorough monitoring. Consult with a Health Physicist.
		> 1 mrem/hour		Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of Health Physicist.
☒ **Organic gases and vapors**	All	VOCs (PID) = >10 ppm Methane (FID) = >500 ppm Carbon Dioxide >2500 ppm		Stop work and consult with EH&S Officer.
☒ **Inorganic gases, vapors, and particulates**	All	H_2S = >5 ppm CO = >12.5 ppm Carbon Dioxide >2500 ppm		Stop work and consult with EH&S Officer.

4.3 ACTION LEVELS

(Attach action level calculations)

Site: START - Westover Landfill, PRP OS

Safety Factor* = 2 (Enter value between 2 and 10; if no value entered, defaults to 2)

Contaminant	Exposure Limit		Weston Action Level	Response Factor	Action Level	Comments
	Conc.	Units				
methane	1000	ppm	500.0	1.00	500.00	2009 TLV (GEM2000, TVA1000)
H2S	10	ppm	5.0	1.00	5.00	2009 TLV (MultiRAE)
CO	25	ppm	12.5	1.00	12.50	2009 TLV (MultiRAE)
CO2	5000		2500.0	1.00	2500.00	2009 TLV (GEM2000)
			0.0		0.00	
			0.0		0.00	

* Safety Factor: Use 2 if site is well characterized; use 3-10 depending on quality of and/or confidence in concentration data from site.

5. HOSPITAL INFORMATION

5.1 CONTINGENCIES

5.1.1 Emergency Contacts and Phone Numbers

Agency	Contact	Phone Number
WorkCare WESTON Medical Director WorkCare WESTON Program Administrator	**Dr. Peter Greaney** **Heather Lind**	**From 6 am to 4:30 pm Pacific Time** call 800-455-6155 dial 0 or extension 175, Heather Lind to request the on-call clinician.
After-Business Hours Contact (In Case of Emergency Only)		**4:31 p.m. – 5:59 a.m. Pacific Time, all day Saturday, Sunday and Holidays** call 800-455-6155 Dial 3 to reach the after-hours answering service. Request that the service connect you with the on-call clinician or the on-call clinician will return your call within 30 minutes.
WESTON Corporate Environmental Health & Safety Director	**Owen B. Douglass, Jr.**	**610.701.3065 / 610.506.5392 (cell)**
WESTON Medical Programs Manager	**Owen B. Douglass, Jr.**	**610.701.3065 / 610.506.5392 (cell)**
WESTON Health & Safety Division Safety Manager	Ted Deecke	847-337-4147 (cell)
WESTON Health & Safety Local Safety Officer	Dave Robinson	937-572-3630 (cell)
Fire Department	Oregon	**911 (emergency)** / 419-698-7062 (non-emergency)
Police Department	Oregon	**911 (emergency)** / 419-698-7021 (non-emergency)
WESTON FSO Cell Phone	TJ McFarland	740-258-7551 (cell)
WESTON PM Cell Phone	TJ McFarland	740-258-7551 (cell)
Client Site Phone	OSC John Gulch	734-740-9017 (cell)
Site Telephone	TJ McFarland	740-258-7551 (cell)
Nearest Telephone		
Poison Control		**(800) 222-1222**

Local Medical Emergency Facility(s)

Name of Hospital: **St. Vincent Mercy Medical Center**

Address: **2213 Cherry St., Toledo, Ohio 43608**		Phone No.: 419-251-3232
Name of Contact:		Phone No.: 911
Type of Service: ☐ Physical trauma only ☐ Chemical exposure only ☒ Physical trauma and chemical exposure ☒ Available 24 hours	**Route to Hospital:** **(See Attached)**	**Travel time from site:** 5 minutes **Distance to hospital:** 13 miles **Name/no. of 24-hr ambulance service:** 911

Secondary or Specialty Service Provider

Name of Hospital: **St. Charles Mercy Hospital**

Address: 2600 Navarre Ave., Oregon, Ohio 43616	Phone No.: 419-696-7200
Name of Contact:	Phone No.: 911

Type of Service:	Route to Hospital (see attached):	Travel time from site:
☒ Physical trauma only ☐ Chemical exposure only ☐ Physical trauma and chemical exposure ☒ Available 24 hours	1. Start out going SOUTHWEST on OTTER CREEK RD toward YORK ST.Zoom to this StepAvoid this Step 0.6 mi 2. Turn RIGHT onto CORDUROY RD.Zoom to this StepAvoid this Step 0.2 mi 3. CORDUROY RD becomes CONSAUL ST.Zoom to this StepAvoid this Step 0.5 mi 4. Turn LEFT onto N WHEELING ST.N WHEELING ST is just past WHITLOCK AVE	6 minutes **Distance to hospital:** 3.36 miles **Name/no. of 24-hr ambulance service:** /

See reporting an incident in Attachment F.

5.1.2 Hospital Map

(Attach hospital map and directions)

5.1 CONTINGENCIES

5.1.3 Response Plans

<table>
<tr><td rowspan="3">Medical - General

Provide first aid, if trained; assess and determine need for further medical assistance.

Transport or arrange for transport after appropriate decontamination.</td><td>First Aid Kit:
☒ Yes ☐ No

Blood Borne Pathogens Kit:
☒ Yes ☐ No</td><td>Type
Standard 20-man and infection control kit</td><td>Location
In Vehicle</td><td>Special First-Aid Procedures:
Cyanides on-site
☐ Yes ☒ No

If yes, contact LMF. Do they have antidote kit?
☐ Yes ☐ No</td></tr>
<tr><td>Eyewash required
☒ Yes ☐ No</td><td>Type
Bottle</td><td>Location
In Vehicle</td><td>HF on-site
☐ Yes ☐ No

If yes, need neutralizing ointment for first-aid kit. Contact LMF.</td></tr>
<tr><td>Shower required
☐ Yes ☒ No</td><td>Type</td><td>Location</td><td></td></tr>
</table>

<table>
<tr><th colspan="2">Plan for Response to Spill/Release</th><th colspan="2">Plan for Response to Fire/Explosion</th><th>Fire Extinguishers</th></tr>
<tr><td>In the event of a spill or release, ensure safety, assess situation, and perform containment and control measures, as appropriate.</td><td>a. Cleanup per MSDSs if small; or sound alarm, call for assistance, notify Emergency Coordinator
b. Evacuate to pre-determined safe place
c. Account for personnel
d. Determine if team can respond safely
e. Mobilize per Site Spill Response Plan</td><td>In the event of a fire or explosion, ensure personal safety, assess situation, and perform containment and control measures, as appropriate:</td><td>a. Sound alarm and call for assistance, notify Emergency Coordinator
b. Evacuate to predetermined safe place
c. Account for personnel
d. Use fire extinguisher <u>only if safe and trained</u> in its use
e. Stand by to inform emergency responders of materials and conditions</td><td>Type/Location
<u>ABC/Vehicle</u>
/
/
/
/
/
/</td></tr>
<tr><td>Description of Spill Response Gear
NA</td><td>Location</td><td colspan="2">Description (Other Fire Response Equipment)</td><td>Location</td></tr>
<tr><td></td><td></td><td colspan="2"></td><td></td></tr>
<tr><td colspan="5">Plan to Respond to Security Problems
Call 911.</td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="5"></td></tr>
<tr><td colspan="5"></td></tr>
</table>

6. DECONTAMINATION PLAN

6.1 GENERAL DECONTAMINATION PLAN

Personnel Decontamination

Consistent with the levels of protection required, step-by-step procedures for personnel decontamination for each level of protection are attached.

Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be:

☐ Level B ☐ Level C ☒ Level D

Modifications include:

Disposition of Decontamination Wastes

Provide a description of waste disposition including identification of storage area, hauler, and final disposal site, if applicable

Disposable gloves, booties, and coveralls will be disposed of as solid waste, in accordance with solid waste regulations.

Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows:

If needed, air monitoring equipment will be wiped down with a cloth dampened with DI water and possibly an alconox solution.

Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

NA

6.2 LEVEL D DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☒ Boot cover removal	Dispose of in a trash bag.
☒ Outer glove removal	Dispose of in a trash bag.
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☐ Suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☒ Inner glove removal	Dispose of in a trash bag.
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:
Remove all PPE, place in a trash bag, and dispose of as solid waste.

Disposal Plan, End of Week:
See above.

Disposal Plan, End of Project:
See above.

6.3 LEVEL C DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☒ Tape removal - outer glove and boot	Dispose of in a trash bag.
☒ Boot cover removal	Dispose of in a trash bag.
☒ Outer glove removal	Dispose of in a trash bag.
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/boot/glove rinse	
☐ Safety boot removal	
☒ Suit removal	Dispose of in a trash bag.
☐ Inner glove wash	
☐ Inner glove rinse	
☒ Inner glove removal	Dispose of in a trash bag.
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:
Remove all PPE, place in a trash bag, and dispose of as solid waste.

Disposal Plan, End of Week:
See above.

Disposal Plan, End of Project:
See above.

6.4 LEVEL B DECONTAMINATION PLAN

Check indicated functions or add steps, as necessary:

Function	Description of Process, Solution, and Container
☐ Segregated equipment drop	
☐ Boot cover and glove wash	
☐ Boot cover and glove rinse	
☐ Tape removal - outer glove and boot	
☐ Boot cover removal	
☐ Outer glove removal	
HOTLINE	
☐ Suit/safety boot wash	
☐ Suit/SCBA/boot/glove rinse	
☐ Safety boot removal	
☐ Remove SCBA backpack without disconnecting	
☐ Splash suit removal	
☐ Inner glove wash	
☐ Inner glove rinse	
☐ SCBA disconnect and facepiece removal	
☐ Inner glove removal	
☐ Inner clothing removal	
CONTAMINATION REDUCTION ZONE (CRZ)/SAFE ZONE BOUNDARY	
☐ Field wash	
☐ Redress	

Disposal Plan, End of Day:

Disposal Plan, End of Week:

Disposal Plan, End of Project:

7. TRAINING AND BRIEFING TOPICS/SIGN OFF SHEET

7.1 TRAINING AND BRIEFING TOPICS

The following items will be covered at the site-specific training meeting, daily or periodically.

☐ Site characterization and analysis, Sec. 3.0, 29 CFR 1910.120 I	☐ Level A
☒ Physical hazards	☐ Level B
☒ Chemical hazards	☐ Level C
☒ Animal bites, stings, and poisonous plants	☒ Level D
☐ Etiologic (infectious) agents	☒ Monitoring, 29 CFR 1910.120 (h)
☐ Site control, 29 CFR 1910.120 d	☐ Decontamination, 29 CFR 1910.120 (k)
☐ Engineering controls and work practices, 29 CFR 1910.120 (g)	☒ Emergency response, 29 CFR 1910.120 (l)
☐ Heavy machinery	☒ Elements of an emergency response, 29 CFR 1910.120 (l)
☐ Forklift	☒ Procedures for handling site emergency incidents, 29 CFR 1910.120 (l)
☐ Backhoe	☐ Off-site emergency response, 29 CFR 1910.120 (l)
☒ Equipment	☐ Handling drums and containers, 29 CFR 1910.120 (j)
☒ Tools	☐ Opening drums and containers
☐ Ladder, 29 CFR 1910.27 (d)/29 CFR 1926	☐ Electrical material handling equipment
☐ Overhead and underground utilities	☐ Radioactive waste
☐ Scaffolds	☐ Shock-sensitive waste
☐ Structural integrity	☐ Laboratory waste packs
☐ Unguarded openings - wall, floor, ceilings	☐ Sampling drums and containers
☐ Pressurized air cylinders	☐ Shipping and transport, 49 CFR 172.101, IATA
☐ Personal protective equipment, 29 CFR 1910.120 (g); 29 CFR 1910.134	☐ Tank and vault procedures
☐ Respiratory protection, 29 CFR 1910.120 (g); ANSI Z88.2	☐ Illumination, 29 CFR 1910.120 (m)
☐ Working over water FLD-19	☐ Sanitation, 29 CFR 1910.120 (n)
☐ Boating safety FLD-18	☐ Proper lifting techniques
☒ Heat Stress / Cold Stress	☐

7.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM

Site Name: Westover Landfill	**WO#:** 20405.012.001.1376.00
Address: 820 Otter Creek Rd., Oregon, Ohio	
I understand, agree to, and will conform with the information set forth in this Health and Safety Plan (and attachments) and discussed in the personnel health and safety briefing(s).	

Name	Signature	Date

ATTACHMENT A
CHEMICAL CONTAMINANTS DATA SHEETS

Insert sheets on following page.

NIOSH POCKET GUIDE TO CHEMICAL HAZARDS

Hydrogen sulfide	**CAS** 7783-06-4
H_2S	**RTECS** MX1225000
Synonyms & Trade Names Hydrosulfuric acid, Sewer gas, Sulfuretted hydrogen	**DOT ID & Guide** 1053 117

Exposure Limits	NIOSH REL: C 10 ppm (15 mg/m^3) [10-minute]
	OSHA PEL†: C 20 ppm 50 ppm [10-minute maximum peak]

IDLH 100 ppm See: 7783064	**Conversion** 1 ppm = 1.40 mg/m^3

Physical Description
Colorless gas with a strong odor of rotten eggs. [Note: Sense of smell becomes rapidly fatigued & can NOT be relied upon to warn of the continuous presence of H_2S. Shipped as a liquefied compressed gas.]

MW: 34.1	BP: -77°F	FRZ: -122°F	Sol: 0.4%
VP: 17.6 atm	IP: 10.46 eV	RGasD: 1.19	
Fl.P: NA (Gas)	UEL: 44.0%	LEL: 4.0%	

Flammable Gas

Incompatibilities & Reactivities
Strong oxidizers, strong nitric acid, metals

Measurement Methods NIOSH 6013; OSHA ID141; See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection) Skin: Frostbite Eyes: Frostbite Wash skin: No recommendation Remove: When wet (flammable) Change: No recommendation Provide: Frostbite wash	**First Aid** (See procedures) Eye: Frostbite Skin: Frostbite Breathing: Respiratory support

Important additional information about respirator selection
Respirator Recommendations NIOSH
Up to 100 ppm:
(APF = 25) Any powered, air-purifying respirator with cartridge(s) providing protection against the compound of concern
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern
(APF = 10) Any supplied-air respirator*
(APF = 50) Any self-contained breathing apparatus with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin and/or eye contact

Symptoms Irritation eyes, respiratory system; apnea, coma, convulsions; conjunctivitis, eye pain, lacrimation (discharge of tears), photophobia (abnormal visual intolerance to light), corneal vesiculation; dizziness, headache, lassitude (weakness, exhaustion), irritability, insomnia; gastrointestinal disturbance; liquid: frostbite

Target Organs Eyes, respiratory system, central nervous system

NIOSH Pocket Guide to Chemical Hazards

Carbon monoxide	**CAS** 630-08-0
CO	**RTECS** FG3500000
Synonyms & Trade Names Carbon oxide, Flue gas, Monoxide	**DOT ID & Guide** 1016 119 9202 168 (cryogenic liquid)

Exposure Limits	NIOSH REL: TWA 35 ppm (40 mg/m^3) C 200 ppm (229 mg/m^3)
	OSHA PEL†: TWA 50 ppm (55 mg/m^3)

IDLH 1200 ppm See: 630080 | **Conversion** 1 ppm = 1.15 mg/m^3

Physical Description
Colorless, odorless gas. [Note: Shipped as a nonliquefied or liquefied compressed gas.]

MW: 28.0	BP: -313°F	MLT: -337°F	Sol: 2%
VP: >35 atm	IP: 14.01 eV	RGasD: 0.97	
Fl.P: NA (Gas)	UEL: 74%	LEL: 12.5%	

Flammable Gas

Incompatibilities & Reactivities
Strong oxidizers, bromine trifluoride, chlorine trifluoride, lithium

Measurement Methods NIOSH 6604; OSHA ID209, ID210; See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection)
Skin: Frostbite
Eyes: Frostbite
Wash skin: No recommendation
Remove: When wet (flammable)
Change: No recommendation
Provide: Frostbite wash

First Aid (See procedures)
Eye: Frostbite
Skin: Frostbite
Breathing: Respiratory support

Important additional information about respirator selection
Respirator Recommendations NIOSH
Up to 350 ppm:
(APF = 10) Any supplied-air respirator
Up to 875 ppm:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode
Up to 1200 ppm:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern†
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece
Emergency or planned entry into unknown concentrations or IDLH conditions:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted canister providing protection against the compound of concern†/Any appropriate escape-type, self-contained breathing apparatus

Exposure Routes inhalation, skin and/or eye contact (liquid)

Symptoms Headache, tachypnea, nausea, lassitude (weakness, exhaustion), dizziness, confusion, hallucinations; cyanosis; depressed S-T segment of electrocardiogram, angina, syncope

Target Organs cardiovascular system, lungs, blood, central nervous system

INTERNATIONAL CHEMICAL SAFETY CARDS

METHANE

ICSC: 0291

Methyl hydride
CH_4
Molecular mass: 16.0
(cylinder)

ICSC # 0291
CAS # 74-82-8
RTECS # PA1490000
UN # 1971
EC # 601-001-00-4
February 10, 2000 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Extremely flammable.	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with water spray, powder, carbon dioxide.
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Use non-sparking handtools.	In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position.
EXPOSURE			
•INHALATION	Suffocation. See Notes.	Ventilation. Breathing protection if high concentration.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
•SKIN	ON CONTACT WITH LIQUID: FROSTBITE.	Cold-insulating gloves.	ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Refer for medical attention.
•EYES	ON CONTACT WITH LIQUID: FROSTBITE.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION			

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: self-	Fireproof. Cool. Ventilation along	

contained breathing apparatus. Evacuate danger area! Consult an expert! Ventilation. Remove all ignition sources. NEVER direct water jet on liquid.	the floor and ceiling.	F+ symbol R: 12 S: 2-9-16-33 UN Hazard Class: 2.1

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0291	Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

IMPORTANT DATA	**PHYSICAL STATE; APPEARANCE:** COLOURLESS, COMPRESSED OR LIQUEFIED GAS , WITH NO ODOUR. **PHYSICAL DANGERS:** The gas is lighter than air. **CHEMICAL DANGERS:** **OCCUPATIONAL EXPOSURE LIMITS:** TLV: (aliphatic hydrocarbons gases, Alkane C1-C4) 1000 ppm (as TWA) (ACGIH 2005). MAK not established.	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation. **INHALATION RISK:** On loss of containment this gas can cause suffocation by lowering the oxygen content of the air in confined areas. **EFFECTS OF SHORT-TERM EXPOSURE:** Rapid evaporation of the liquid may cause frostbite. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: -161°C Melting point: -183°C Solubility in water, ml/100 ml at 20°C: 3.3 Relative vapour density (air = 1): 0.6	Flash point: Flammable Gas Auto-ignition temperature: 537°C Explosive limits, vol% in air: 5-15 Octanol/water partition coefficient as log Pow: 1.09
ENVIRONMENTAL DATA		

NOTES

Density of the liquid at boiling point: 0.42 kg/l. High concentrations in the air cause a deficiency of oxygen with the risk of unconsciousness or death. Check oxygen content before entering area. Turn leaking cylinder with the leak up to prevent escape of gas in liquid state. After use for welding, turn valve off; regularly check tubing, etc., and test for leaks with soap and water. The measures mentioned in section PREVENTION are applicable to production, filling of cylinders, and storage of the gas. Other UN number: 1972 (refridgerated liquid), Hazard class: 2.1. Card has been partly updated in October 2005. See section

Emergency Response.

Transport Emergency Card: TEC (R)-20G1F

NFPA Code: H 1; F 4; R 0;

ADDITIONAL INFORMATION

ICSC: 0291 **METHANE**

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

ATTACHMENT B
MATERIAL SAFETY DATA SHEETS

(ATTACH MSDSS)

Insert documents on following page.

ATTACHMENT C

SAFETY PROCEDURES/FIELD OPERATING PROCEDURES (FLD OPS)

Insert documents on following page.

ATTACHMENT D
HAZARD COMMUNICATION PROGRAM

SITE-SPECIFIC HAZARD COMMUNICATION PROGRAM

Location-Specific Hazard Communication Program/Checklist

To ensure an understanding of and compliance with the Hazard Communication Standard, WESTON will use this checklist/document (or similar document) in conjunction with the WESTON Written Hazard Communication Program as a means of meeting site- or location-specific requirements.

While responsibility for activities within this document reference the WESTON Safety Officer (SO), it is the responsibility of all personnel to effect compliance. Responsibilities under various conditions can be found within the WESTON Written Hazard Communication Program.

To ensure that information about the dangers of all hazardous chemicals used by WESTON are known by all affected employees, the following Hazard Communication Program has been established. All affected personnel will participate in the Hazard Communication Program. This written program, as well as WESTON's Corporate Hazard Communication Program, will be available for review by any employee, employee representative, representative of OSHA, NIOSH, or any affected employer/employee on a multi-employer site.

☐ Site or other location name/address: 820 Otter Creek Road, Toledo, OH

☐ Site/Project/Location Manager: TJ McFarland

☐ Site/Location Safety Officer: TJ McFarland

☐ List of chemicals compiled, format: ☒ HASP ☐ Other: _____

☐ Location of MSDS files: _____

☐ Training conducted by: Name: TJ McFarland Date: _____

☐ Indicate format of training documentation: ☒ Field Log: ☐ Other: _____

☐ Client briefing conducted regarding hazard communication: USEPA

☐ If multi-employer site (client, subcontractor, agency, etc.), indicate name of affected companies:

_____

☐ Other employer(s) notified of chemicals, labeling, and MSDS information: _____

☐ Has WESTON been notified of other employer's or client's hazard communication program(s), as necessary? ☐ Yes ☐ No

List of Hazardous Chemicals

A list of known hazardous chemicals used by WESTON personnel must be prepared and attached to this document or placed in a centrally identified location with the MSDSs. Further information on each chemical may be obtained by reviewing the appropriate MSDS. The list will be arranged to enable cross-reference with the MSDS file and the label on the container. The SO or Location Manager is responsible for ensuring the chemical listing remains up-to-date.

Container Labeling

The WESTON SO will verify that all containers received from the chemical manufacturer, importer, or distributor for use on-site are clearly labeled.

The SO is responsible for ensuring that labels are placed where required and for comparing MSDSs and other information with label information to ensure correctness.

Material Safety Data Sheets (MSDSs)

The SO is responsible for establishing and monitoring WESTON's MSDS program for the location. The SO will ensure that procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. He/she will see that any new information is passed on to the affected employees. If an MSDS is not received at the time of initial shipment, the SO will call the manufacturer and have an MSDS delivered for that product in accordance with the requirements of WESTON's Written Hazard Communication Program.

A log for, and copies of, MSDSs for all hazardous chemicals in use will be kept in the MSDS folder at a location known to all site workers. MSDSs will be readily available to all employees during each work shift. If an MSDS is not available, immediately contact the WESTON SO or the designated alternate. When a revised MSDS is received, the SO will immediately replace the old MSDS.

Employee Training and Information

The SO is responsible for the WESTON site-specific personnel training program. The SO will ensure that all program elements specified below are supplied to all affected employees.

At the time of initial assignment for employees to the work site, or whenever a new hazard is introduced into the work area, employees will attend a health and safety meeting or briefing that includes the information indicated below.

- Hazardous chemicals present at the work site.
- Physical and health risks of the hazardous chemicals.
- The signs and symptoms of overexposure.
- Procedures to follow if employees are overexposed to hazardous chemicals.
- Location of the MSDS file and Written Hazard Communication Program.
- How to determine the presence or release of hazardous chemicals in the employee's work area.
- How to read labels and review MSDSs to obtain hazard information.
- Steps WESTON has taken to reduce or prevent exposure to hazardous chemicals.
- How to reduce or prevent exposure to hazardous chemicals through the use of controls procedures, work practices, and personal protective equipment.
- Hazardous, nonroutine tasks to be performed (if any).
- Chemicals within unlabeled piping (if any).

Hazardous Nonroutine Tasks

When employees are required to perform hazardous nonroutine tasks, the affected employee(s) will be given information by the SO about the hazardous chemicals he or she may use during such activity. This information will include specific chemical hazards, protective and safety measures the employee can use, and steps WESTON is using to reduce the hazards. These steps include, but are not limited to, ventilation, respirators, presence of another employee, and emergency procedures.

Chemicals in Unlabeled Pipes

Work activities may be performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee will contact the SO, at which time information as to the chemical(s) in the pipes, potential hazards of the chemicals or the process involved, and the safety precautions that should be taken will be determined and presented.

Multi-Employer Work Sites

It is the responsibility of the SO to provide other employers with information about hazardous chemicals imported by WESTON to which their employees may be exposed, along with suggested safety precautions. It is also the responsibility of the SO and the Site Manager to obtain information about hazardous chemicals used by other employers to which WESTON employees may be exposed. WESTON's chemical listing will be made available to other employers, as requested. MSDSs will be available for viewing, as necessary.

The location, format, and/or procedures for accessing MSDS information must be relayed to affected employees.

ATTACHMENT E
AIR SAMPLING DATA SHEETS

SITE AIR MONITORING PROGRAM

Field Data Sheets

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				**Detector Tube(s)**				
Sound Levels (dBA)		**Illumination**	**pH**	**Other**	**Other**	**Other**	**Other**	**Other**

Location:

% LEL	% O_2	PID (units)	FID (units)	Aerosol Monitor (mg/m^3)	GM: Shield Probe/ Thin Window		NaI (uR/hr)	ZnS (cpm)
					mR/hr	cpm		
Monitox (ppm)				**Detector Tube(s)**				
Sound Levels (dBA)		**Illumination**	**pH**	**Other**	**Other**	**Other**	**Other**	**Other**

AIR MONITORING/SAMPLING DATA LOG

Client:	**W.O. No.:**	**Sample No.:**
Address:	**Sampled By:**	**Date:**

Employee and Location Information

Employee Name:	**Employee No.:**	**Job Title**:

Respirator ☐ APR ☐ ½ Mask ☐ Full Face ☐ PAPR ☐ ½ Mask ☐ Full Face ☐ Hood ☐ SAR ☐ ½ Mask ☐ Full Face ☐ Hood ☐ SCBA	**Manufacturer:**	**Cartridge Type:**

PPE: ☐ Hard Hat ☐ HPD ☐ Gloves ☐ Safety Shoes ☐ Coveralls ☐ Other:

Sampling Data

Sampling Type: ☐ Personal ☐ TWA ☐ STEL ☐ Area ☐ Source ☐ Full Shift ☐ Partial Shift ☐ Grab	**Media:**	**Pump Type/Serial No.:** /
Calibrator/Serial No.: /	**Pre-Calibration:** 1. 2. 3. **avg-pre:**	**Post-Calibration:** 1. 2. 3. **avg-post**:

Start Time:	**Restart Time:**	**Restart Time:**	**Avg. Flowrate:**	**% Change:**
1st Stop Time:	**2nd Stop Time:**	**3rd Stop Time:**	**Total Time:**	**Volume:**

Multiple Samples for this TWA: ☐ Yes ☐ No	**Multiple Chemical Exposures:** ☐ Yes ☐ No	**Exposure Time:** ☐ Normal ☐ Worst Case

Sampling Conditions

Weather Conditions: Temp: R.H: B.P.: Other:

Engineering Controls:

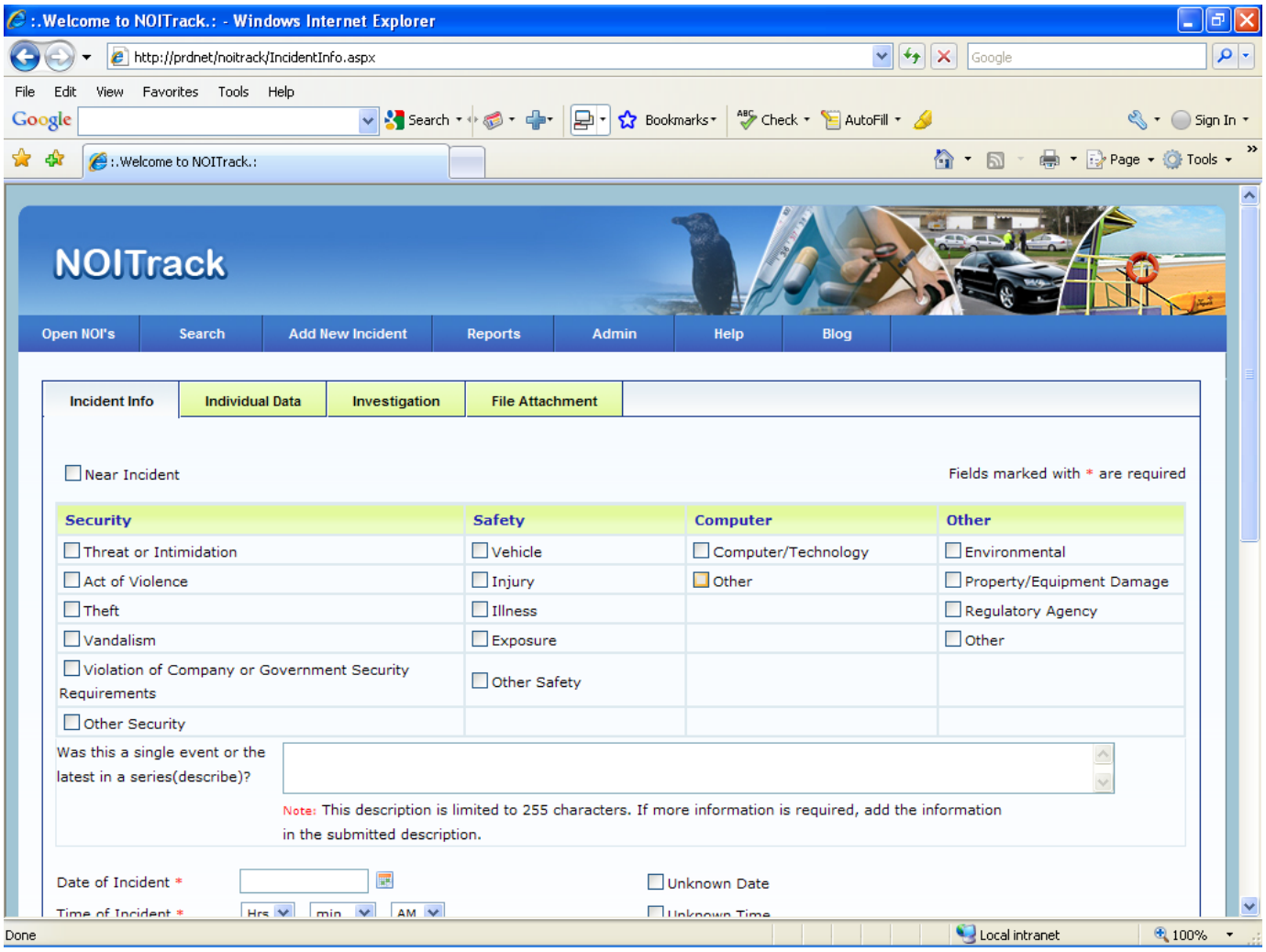
Substances Evaluated

Substance	Result	Substance	Result	Substance	Result

Observations and Comments

QA by: _____ **Date: _____**

ATTACHMENT F
INCIDENT REPORTING



Please go to NOITrack using the following link to complete incident reporting. If you are in the field and do not have access to NOITrack, please contact someone in your office to do the reporting for you.

http://prdnet/noitrack/IncidentInfo.aspx

Questions can be directed to Susan Hipp-Ludwick at 610.701.3046 or Matt Dillon at 610.701.3667

ATTACHMENT G
AHA CHECKLIST AND ENVIRONMENTAL COMPLIANCE

HAZARD CHECKLIST Site Manager/EHS Officer: TJ McFarland
Date: 3/30/11
Location: Westover Landfill Site
Address: 820 Otter Creek Road, Toledo, OH

Task Team (name or reference via daily sign-in sheet)

HAZARDS IDENTIFIED (check those applicable)

	Chemical		Biological		Physical		Aerial lifts		Remote Areas
☒	Flammable/combustible	☒	Insects	☐	Noise	☐	Man. Material Handling	☐	Materials handling
☐	Corrosive	☒	Animals	☒	Heat	☐	Demolition	☐	High Pressure Washers
☐	Oxidizer	☒	Plants	☒	Cold	☐	Excavation	☐	Hand and Power Tools
☐	Reactive	☐	Mold/Fungus	☒	Inclement Weather	☐	Pile Driving	☐	Low Illumination
☒	Toxic	☐	Viral/Bacterial	☐	Hot Work	☐	Welding/Cutting/Burn	☐	Drilling & Boring
☒	Inhalation	☐	Density Gauges	☐	Confined Spaces	☐	Hot Surfaces	☐	Striking against/Struck-by
☒	Eyes/Skin	☐	Radiological	☐	Stored hazardous Energy	☐	Hot Materials	☐	Caught-in/Caught between
☐	Pesticides	☐	Ultra-Violet	☐	Elevation	☐	Rough Terrain	☐	Pushing/pulling
☐	Carcinogen	☒	Sunlight	☐	Utilities	☐	Compressed Gases	☒	Falls at same level
☐	Asbestos	☐	Infrared	☒	Machinery	☐	Hazardous Mat. Storage	☐	Falls from elevation
☒	Lead (Leachate)	☐	Lasers	☐	Mobile equipment	☐	Diving	☐	Repetitive motion
☐	UXO/OE/ CWM	☐	XRF	☐	Cranes	☐	Operation of Boats	☐	High (>110v) Electricity
☐	Process Safety	☐	Isotopes	☐	Manual Material Handling	☐	Working Over Water	☒	Slippery surface Ice/Snow
☐	Applying Paint/Coatings	☐		☐	Ladders	☐	Traffic	☐	
☐		☐		☐	Scaffolding	☐	Site Security	☐	

REQUIRED PROTECTION (check those applicable)

	Engineering Controls		Administrative Control		PPE				Contingency
☐	Guard Rails	☒	Qualified for task	☐	Air Supplying Respirator	☒	Tyvek coveralls	☒	Emergency Signal Known
☐	Machine Guards	☒	Trained/Certified	☒	Air Purifying Respirator	☒	Coated Coveralls	☒	Eye wash/shower Location
☐	Sound Barriers	☐	Hot Work Permit	☐	SCBA	☐	Welding leathers	☒	First Aid Kit Location
☐	Enclosure	☐	CSE Permit	☒	Hard Hat	☐	CWM	☒	Fire Extinguisher Location
☐	Elevation	☐	Lockout/Tag Out	☐	Ear Plugs	☒	Safety Shoes/Boots	☐	Spill Kit Location
☐	Isolation	☐	Work Permit	☐	Ear Muffs	☒	Rubber Boots	☐	Severe weather shelter
☐	GFCI	☐	Dig Safe Permit	☒	Safety Glasses	☐	Gloves	☐	Evacuation Routes
☐	Assured Ground Program	☐	Contingency Plan	☐	Goggles	☐	Cooling Suits		
☐	Apply Anti-slip/skid Mat	☐	Critical Lift Plans	☐	Chemical Goggles	☐	Ice Vests		
		☐	Equip. Inspection Sheets	☐	Face Shield	☐	Radiant heat Suits		
				☐	Thermal Shield	☐	Fall Arrest		
				☐	Welding Mask	☐	PFD		
				☐	Cutting Glasses	☐	Electrical insulation		

Any Modification to Tasks (list)	Other tasks or activities that may affect my activity	Reasons for any changes indicated above

Environmental Compliance Considerations:

☐	Generation of Hazardous Waste*	☐	→Waste Identification & Manifesting - Marking, Placarding, Labeling
☐	Generation of Investigation Derived Waste*	☐	→Training & Licensing for Use of Radioactive Materials/Sources
☐	Treatment, Storage, or Disposal of Hazardous Waste*	☐	→ Containers: dated, labeled, closed, full, stored less than 90 days
☐	Contingency to prevent or contain hazardous materials or oil spills or discharges to drains, body of water, soil*	☐	→ Risk of explosion or catastrophic release due to chemical storage or processing involving reactivity, flammables, solvents or explosives
☐	Disturbing of Asbestos Containing Materials (ACM)*	☐	→Training & Licensing for Asbestos Remediation Activities
☐	Application of Pesticides or Herbicides*	☐	
☐	Work on Above or Under-ground Storage Tanks*	☐	
☐	Transportation, Storage or Disposal of Radioactive Material*	☐	
☐	Activities producing or generating Air Emissions (or fugitive "fence-line" emissions) requiring either monitoring and/or permit*	☐	
☐	Excavations, Drilling, Probing or other activities that could impact underground utilities, pipelines, sewer or treatment systems.	☐	
☐	Shipment of Hazardous Waste off-site* Shipment of Samples in accordance with DOT/IATA	☐	

* Indicates need for an environmental compliance plan.

ATTACHMENT H
TRAFFIC CONTROL PLAN

Insert documents on following page.

ATTACHMENT I
AUDIT FORMS

Insert documents on following page.

ATTACHMENT J
ENVIRONMENTAL HEALTH & SAFETY INSPECTION CHECKLIST

ENVIRONMENTAL HEALTH AND SAFETY INSPECTION CHECKLIST

Project Name: _____

Inspector: _____

Submit to: _____

Date: _____

THE WESTON SITE APPEARANCE

YES	NO		COMMENT
☐	☐	Is the site secured to prevent inadvertent, unnecessary, or unauthorized access? Are gates closed and locked at any time that the access point is not occupied or visible to site workers?	
☐	☐	Are access points posted with signs to indicate client and end-user client name, WESTON's name and logo, names of other contractors and sub-contractors, project name and location, and appropriate safety messages?	
☐	☐	Are required postings in place (e.g., Labor Poster, Emergency Phone Numbers, Site Map, etc.)?	
☐	☐	Are site trailers tied down per local code and provided with stairs that have a landing platform with guard and stair railings?	
☐	☐	Is a Site Safety file system established in the office to maintain records required by applicable safety regulations	
☐	☐	Is the Health and Safety Plan (HASP) or Accident Prevention Plan (APP) amended as scope of work changes, hazards are discovered or eliminated or if risk change?	
☐	☐	Is the Site Safety Plan and the Safety Officers Field Manual on site?	
☐	☐	Is new employee indoctrination provided?	
☐	☐	Have site Rules been provided, discussed and signed off on by all employees	
☐	☐	Incident Reporting procedure explained to all?	
☐	☐	Is site management trained in the WESTON (and client as applicable) Incident Reporting system?	
☐	☐	Are NOI and Supplemental Report forms and OSHA 300 Log available on site?	
☐	☐	Is Site Management aware of the Case Management and Incident Investigation Procedures?	
☐	☐	Is there a list of preferred provider medical facilities available?	
☐	☐	Has the "Inspection By A Regulatory Agency" procedure been reviewed by all site management?	
☐	☐	Will Competent Persons be required because of activities to be performed, equipment to be used or hazards to be encountered?	

POLICIES

YES	NO		COMMENT
☐	☐	Each individual employee is aware that he or she responsible for complying with applicable safety requirements, wearing prescribed safety equipment and preventing avoidable accidents.	
☐	☐	Do employees understand that they will wear clothing suitable for existing weather and work conditions and the minimum work uniform will include long pants, sleeved work shirts, protective footwear, hard hat, and safety glasses unless otherwise specified via the HASP.	
☐	☐	Are employees provided safety and health training to enable them to perform their work safely ? Is all training documented to indicate the date of the session, topics covered, and names of participants?	
☐	☐	Safety meetings are conducted daily. The purpose of the meetings are to review past activities, review pertinent tailgate safety topics and establish safe working procedures for anticipated hazards encountered during the day.	
☐	☐	Training has been provided to all personnel regarding handling of emergency situations that may arise from the activity or use of equipment on the project.	
☐	☐	Employees/contractors are informed and understand that they may not be under the influence of alcohol, narcotics, intoxicants or similar mind-altering substances at any time. Employees found under the influence of or consuming such substances will be immediately removed from the job site.	
☐	☐	Site workers and operators of any equipment or vehicles are able to read and understand the signs, signals and operating instructions of their use.	
☐	☐	Have contractors performing work provided copies of relevant documentation (such as medical fit-for-duty, training certificates, fit-tests, etc.) prior to initiation of the project?	

SANITATION
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 2

YES	NO		COMMENT
☐	☐	Is an adequate supply of drinking water provided. Is potable/drinking water labeled as such? Are there sufficient drinking cups provided?	
☐	☐	Is there a sufficient number of toilets?	
☐	☐	Are washing facilities readily available and appropriate for the cleaning needs?	
☐	☐	Are washing facilities kept sanitary with adequate cleansing and drying materials?	
☐	☐	Waste is secured so as not to attract rodents, insects or other vermin?	
☐	☐	Is an effective housekeeping program established and implemented?	

ACCIDENT PREVENTION SIGNS, TAGS, LABELS, SIGNALS, AND PIPING SYSTEM IDENTIFICATION
29 CFR 1926 Subpart G. EM 385-1-1, Section 8

YES	NO		COMMENT
☐	☐	Are signs, tags, and labels provided to give adequate warning and caution of hazards and instruction/directions to workers and the public?	
☐	☐	Are all employees informed as to the meaning of the various signs, tags and labels used in the workplace and what special precautions are required?.	
☐	☐	Are construction areas posted with legible traffic signs at points of hazard?	
☐	☐	Are signs required to be seen at night lighted or reflectorized?	
☐	☐	Tags contain a signal word (“danger” or “caution”) and a major message to indicate the specific hazardous condition or the instruction to be communicated to the employee. Tags follow requirements as outlined in 29 CFR 1926.200.	

MEDICAL SERVICES AND FIRST AID
29 CFR 1926 Subparts C, D. EM 385-1-1, Section 3

YES	NO		COMMENT
☐	☐	Is a local medical emergency facility (LMEF) identified in the HASP or APP?	
☐	☐	Has the LMEF been visited to verify the directions and establish contacts?	
☐	☐	Has site management reviewed WESTON’s incident management procedures?	
☐	☐	Have clinics and specialists that will help WESTON manage injuries and illnesses been identified?	
☐	☐	Is there at least two (2) people certified in First Aid and CPR?	
☐	☐	Are first aid kits available at the command post and appropriate remote locations?	
☐	☐	Are first Aid Kits and Eyewash/Safety Showers inspected weekly?	
☐	☐	Are 15 minute eyewash/safety showers in place if required.	

FIRE PREVENTION AND PROTECTION
29 CFR 1926 Subpart F. EM 385-1-1, Section 9

YES	NO		COMMENT
☐	☐	Is an Emergency Response and Contingency Plan in place?	
☐	☐	Are emergency phone numbers posted?	
☐	☐	Are fire extinguishers selected and provided based on the types of materials and potential fire classes in each area.	
☐	☐	Are fire extinguishers provided in each administrative and storage trailer, within 50 ft but no closer than 25 ft of any fuel or flammable liquids storage, on welding and cutting equipment, on mechanical equipment?	
☐	☐	Are fire extinguishers checked daily and inspected monthly?	
☐	☐	Do site personnel know the location of fire extinguishers and how to use them?	
☐	☐	Are flammable and combustible liquids stored in approved containers?	
☐	☐	Safety cans are used for dispensing flammable or combustible liquids in 5 gallon or less volumes.	
☐	☐	Are flammable and combustible liquids stored in flammable storage cabinets or appropriate storage areas?	
☐	☐	Are flammable materials separated from oxidizers by at least 20 feet (or 5 foot tall, ½ -hour rated fire wall) when in storage?	
☐	☐	Are fuel storage tanks double walled or placed in a lined berm?	
☐	☐	Spills are cleaned up immediately and wastes are disposed of properly.	
☐	☐	Combustible scrap, debris and waste material (oily rags) are stored in closed metal containers and disposed of promptly.	
☐	☐	Vehicle fueling tanks are grounded and bonding between the tank and vehicle being fueled is provided?	
☐	☐	LPG is stored, handled and used according to OSHA regulations 29 CFR 1926.	
☐	☐	LPG cylinders are not stored indoors.	
☐	☐	Is a hot work permit program in place? See WESTON FLD-36	
☐	☐	Is smoking limited to specific areas, prohibited in flammable storage areas and are signs posted to this effect?	

HAZARDOUS SUBSTANCES, AGENTS AND ENVIRONMENTS
29 CFR 1926 Subparts D, Z. EM 385-1-1, Sections 6, 28

YES	NO		COMMENT
☐	☐	Are operations, materials and equipment evaluated to determine the presence of hazardous contaminants or if hazardous agents could be released in the work environment?	
☐	☐	Are MSDS for substances made available at the work-site when any hazardous substance is procured, used, or stored?.	
☐	☐	Are all containers and piping containing hazardous substances labeled appropriately?	
☐	☐	Is there an inventory of hazardous substances?	
☐	☐	Is there a site Specific Hazard Communication Program?	
☐	☐	Spill kits appropriate for the hazardous materials present are on site and their location is known to spill responders.	
☐	☐	Is disposal of excess hazardous chemicals performed according to WESTON's guidelines and RCRA regulations.	
☐	☐	Before initiation of activities where there is an identified asbestos or lead hazard, is there a written plan detailing compliance with OSHA and EPA asbestos or lead abatement requirements? Does the plan comply with state and local authority, and USACE requirements, as applicable?	

☐	☐	Are personnel trained and provided with protection against hazards from animals, poisonous plants and insects?	

PERSONAL PROTECTIVE AND SAFETY EQUIPMENT, RESPIRATORY AND FALL PROTECTION
29 CFR 1926 Subparts D, E, M. EM 385-1-1, Section 5

YES	NO		COMMENT
☐	☐	Do employees understand that the minimum PPE is hard hat, safety glasses with side shields and safety shoes or boots and that long pants and a sleeved shirt are required?	
☐	☐	Has the SSHC reviewed the PPE requirements in the HASP against actual site conditions and certified that the PPE is appropriate? (see Field Manual, PPE Program)	
☐	☐	PPE is inspected, tested and maintained in serviceable and sanitary condition as recommended by the manufacturer. Is defective or damaged equipment taken out of service and repaired or replaced?	
☐	☐	Are workers trained in the use of the PPE required?	
☐	☐	Are personnel exposed to vehicular or equipment traffic, including signal persons, spotters or inspectors required to vests or apparel marked with a reflective or high visibility material?	
☐	☐	Is there a noise hazard? If yes, hearing protection will be required.	
☐	☐	Is there a splash or splatter hazard? Face shields or goggles will be required.	
☐	☐	Will personnel be working in or over water? Personnel Floatation devices will be required.	
☐	☐	Is there a welding hazard? Welding helmet and leathers will be required. Is there a cutting torch hazard? Goggles and protective clothing will be required.	
☐	☐	Is each person on a walking/working surface with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level protected from falling by the use of guardrail systems, safety net systems or personal fall arrest systems? See WESTON FLD 25 (Note General Industry standard is four feet).	
☐	☐	Guardrail systems are used as primary protection whenever feasible. Guardrail construction meets criteria in 29 CFR 1926.502(b).	
☐	☐	Personal fall arrest systems (PFAS) are inspected and appropriate for use.	
☐	☐	Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses are from synthetic fibers.	
☐	☐	Safety nets and safety net installations are constructed, tested and used according to 29 CFR 1926.502.c	
☐	☐	Is respirator use required? See WESTON Respiratory Protection Program	
☐	☐	Persons using respiratory protection have been successfully medically cleared, trained and fit tested.	
☐	☐	Respirators are used according to the manufacturer's instructions, regulatory requirements, selection criteria and health and safety plan provisions.	
☐	☐	For Level C operations with organic vapor contamination, is the cartridge change-out schedule documented?	
☐	☐	Is breathing certified as Grade D, or better, and certification available on-site?	

MACHINERY AND MECHANIZED EQUIPMENT
29 CFR 1926 Subparts N, O. EM 385-1-1, Sections 16, 17, 18

YES	NO		COMMENT
☐	☐	Are inspections of machinery by a competent person established?	
☐	☐	Is equipment inspected daily before its next use?	
☐	☐	Equipment inspection reports are reviewed, followed-up on negative findings and records of inspections are maintained?	
☐	☐	Machinery or equipment found to be unsafe is taken out of service until the unsafe condition has been corrected.	
☐	☐	Is there a preventive maintenance program established?	
☐	☐	Are operators of equipment qualified and authorized to operate?	
☐	☐	Is all self-propelled construction and industrial equipment equipped with a reverse signal alarm?	
☐	☐	Are seats or equal protection provided for each person required to ride on equipment. Are seatbelts installed and worn on motor vehicles, as appropriate.	
☐	☐	All equipment with windshields is equipped with powered wipers. If fogging or frosting is possible, operable defogging or defrosting devices are required.	
☐	☐	Internal combustion engines are not operated in enclosed areas unless adequate ventilation are made. Air monitoring is conducted to assure safe working conditions.	
☐	☐	Is each bulldozer, scraper, dragline, crane, motor grader, front-end loader, mechanical shovel, backhoe, or similar equipment equipped with at least one dry chemical or carbon dioxide fire extinguisher with a minimum rating of 5-B:C?	
☐	☐	Will cranes or other lifting devices be used? If so, are the following documents available on site: 1) a copy of the operating manual, 2) load rating chart, 3) log book, 4) a copy of the last annual inspection and 5) the initial on-site inspection?	
☐	☐	Do operators have certificates of training to operate the type of crane(s) to be used?	
☐	☐	Is a signal person provided when the point of operation is not in full view of the vehicle, machine or equipment operator? When manual (hand) signals are used, is only one person designated to give signals to the operator?	
☐	☐	Signal persons back one vehicle at a time. While under the control of a signal person, drivers do not back or maneuver until directed. Drivers stop if contact with the signal person is lost.	
☐	☐	Is a critical lift plan prepared by a competent person whenever: a lift is not routine, or a lift exceeds 75% of a crane's capacity, a lift results in the load being out of the operator's line of sight, or a lift involves more than one crane, a man basket is used, or the operator believes there is a need for a critical lift plan.	
☐	☐	Fork Lifts (Powered Industrial Trucks) - Will forklifts be used on site?	
☐	☐	All fork lifts meet the requirements of design, construction, stability, inspection, testing, maintenance and operation as indicated in ANSI/ASME B56.1 Safety Standards for Low Lift and High Lift Trucks.	
☐	☐	Do forklift operators have certificates of training?	
☐	☐	Are pile driving operations conducted according to EM 385-1-1, Section 16.L?	
☐	☐	Is drilling equipment operated, inspected, and maintained as specified in the manufacturer's operating manual? Is a copy of the manual available at the work-site? See also the Drilling Safety Guide in the Safety Officers Field Manual.	
☐	☐	Are flag persons provided when operations or equipment on or near a highway expose workers to traffic hazards? Do flag persons and persons working in proximity to a road wear high visibility vests? Are persons exposed to highway vehicle traffic protected by signs in all directions warning of the presence of the flag persons and the work? Do signs and distances from the work zone conform to federal and local regulations?	

MOTOR VEHICLES
29 CFR 1926 Subpart O. EM 385-1-1, Section 18

YES	NO		COMMENT
☐	☐	Motor vehicle operators have a valid permit, license, or certification of ability for the equipment being operated.	
☐	☐	Inspection, maintenance and repair is according to manufacturer's requirements by qualified persons.	
☐	☐	Vehicles are inspected on a scheduled maintenance program.	
☐	☐	Vehicles not in safe operating condition are removed from service until defects are corrected.	
☐	☐	Glass in windshields, windows, and doors is safety glass. Any cracked or broken glass is replaced.	
☐	☐	Seatbelts are installed and worn.	
☐	☐	The number of passengers in passenger-type vehicles does not exceed the number which can be seated.	
☐	☐	Trucks used to transport personnel have securely anchored seating, a rear endgate, and a guardrail.	
☐	☐	No person is permitted to ride with arms or legs outside of a vehicle body; in a standing position on the body; on running boards; seated on side fenders, cabs, cab shields, rear of the truck or on the load.	
☐	☐	ATV operators possess valid state drivers license, have completed an ATV training course prior to operation of the vehicle, and wear appropriate protective equipment such as helmets, boots, and gloves.	

EXCAVATING AND TRENCHING
29 CFR 1926 Subpart P. EM 385-1-1, Section 25

YES	NO		COMMENT
☐	☐	Has the known or estimated location of utility installations such as sewer, telephone, fuel, electric, water lines, or any other underground installations that may be expected to be encountered during excavation been determined before excavation? Have utility locations been verified by designated state services according to state regulations? Has the client provided clearance where state jurisdiction doesn't apply?	
☐	☐	Have overhead utilities in excavation areas been identified and either de-energized, shielded or barricaded so excavating equipment will not come within 10 feet?	
☐	☐	Are inspections of the excavation, the adjacent areas, and protective systems made daily and as necessary by a competent person?	
☐	☐	Are Protective systems in place as prescribed by the competent person?	
☐	☐	Is material removed from excavations managed so it will not overwhelm the protective systems?	
☐	☐	Are barriers provided between excavations and walkways?	
☐	☐	Are excavations by roadways barricaded to warn vehicles of presence or to prevent them from falling in?	
☐	☐	Is there a means of exit from the excavation every 25 feet?	
☐	☐	Is air monitoring required? If yes, Is it performed?	

CONFINED SPACES
29 CFR 1910 Subpart J. EM 385-1-1, Section 6

YES	NO		COMMENT
☐	☐	Is there a Confined Space Entry Program in place?	
☐	☐	Are the confined Spaces identified and labeled?	
☐	☐	Will the Confined Spaces be entered?	
☐	☐	Is appropriate entry documentation used and on-file?	

ELECTRICAL
29 CFR 1926 Subpart K. EM 385-1-1, Section 11

YES	NO		COMMENT
☐	☐	Are electrical installations made according to the National Electrical Code and applicable local codes?	
☐	☐	Qualified electricians make all connections and perform all work within 10 feet of live electric equipment.	
☐	☐	Location of underground, overhead, under floor, behind wall electrical lines is known and communicated. Lines are documented by qualified person as de-energized where necessary.	
☐	☐	Workers understand they must not work near live parts of electric circuits, unless they are qualified as required by OSHA or are protected by de-energizing and grounding the parts, guarding the parts by insulation, or other effective means?	
☐	☐	Employees who regularly work on or around energized electrical equipment or lines are instructed in the cardiopulmonary resuscitation (CPR) methods.	
☐	☐	Workers are prohibited from working alone on energized lines or equipment over 600 volts.	
☐	☐	Are Ground-fault circuit interrupters (GFCI's) or is ground fault circuit protection provided to protect employees from ground-fault hazards for all 115 – 120 Volt, 15 and 20 amp receptacle outlets which are not a part of the permanent wiring of a building or structure at construction sites?	
☐	☐	Circuit breakers are labeled.	
☐	☐	Circuit breaker and all cabinets with exposed electric conductors are kept tightly closed.	
☐	☐	Unused openings (including conduit knockouts) in electrical enclosures and fittings are closed with appropriate covers, plugs or plates.	
☐	☐	Sufficient access and working space is provided and maintained about all electrical equipment to permit ready and safe operations and maintenance.	
☐	☐	Motors are located within sight of their controllers or controller disconnecting means are capable of being locked in the pen position or is a separate disconnecting means installed in the circuit within sight of the motor.	
☐	☐	Are visual inspections of extension cords and cord-and plug-connected equipment conducted daily? Is equipment found damaged or defective tagged and removed from service, and not used until repaired?	
☐	☐	Wet Areas - Is portable lighting used in wet or conductive locations, such as tanks or boilers operated at no more than 12 volts and protected by GFCIs.	
☐	☐	Are electrical installations in hazardous areas to NEC?	
☐	☐	Metal ladders and tools including tape measures or fabric with metal thread are prohibited where contact with energized electrically parts is possible.	
☐	☐	All extension cords are the three-wire type, designed and rated for hard or extra hard usage?	
☐	☐	Worn or frayed electrical cords or cables are taken out of service. Fastening with staples, hanging from nails or suspending extension cords by wire is prohibited.	
☐	☐	Electric wire/flexible cord passing through work areas is protected from damage such as foot traffic, vehicles, sharp corners, projections and pinching? Flexible cords and cables passing through holes are protected by bushings or fittings?	
☐	☐	Before an employee or contractor performs any service or maintenance on a system where the unexpected energizing, start up, or release of kinetic or stored energy could occur and cause injury or damage, the system is to be isolated. Only authorized persons may apply and remove lockouts and tags.	
☐	☐	Contractors planning to use hazardous energy control procedures submit their hazardous energy control plan to the WESTON site safety officer or designee before implementing lockout/tagout procedures.	
☐	☐	There is a site specific hazardous energy control plan that clearly and specifically outlines the scope, purpose, authorization, rules and techniques to be used for the control of hazardous energy.	
☐	☐	Workers possess the knowledge and skills required for the safe application, usage and removal of energy controls.	

WELDING AND CUTTING
29 CFR 1926 Subpart J. EM 385-1-1, Section 10

YES	NO		COMMENT
☐	☐	Prior to performing welding, cutting or any other heat or spark producing activity, an assessment of the area is made by a competent person to identify combustible materials and potential sources of flammable atmospheres.	
☐	☐	Welders, cutters and their supervisors are trained in the safe operation of their equipment, safe welding and cutting practices, hot work permit requirements, and fire protection.	
☐	☐	Welding and cutting equipment is inspected daily before use. Unsafe equipment is taken out of use, replaced or repaired.	
☐	☐	Workers and the public is shielded from welding rays, flashes, sparks, molten metal and slag.	
☐	☐	Employees performing welding, cutting or heating are protected by PPE appropriate for the hazards (e.g., respiratory, vision and skin protection).	
☐	☐	Compatible fire extinguishing equipment is provided in the immediate vicinity of welding or cutting operations.	
☐	☐	Drums, tanks, or other containers and equipment which have contained hazardous materials shall be thoroughly cleaned before welding or cutting. Cleaning shall be performed in accordance with NFPA 327, Cleaning or Safeguarding Small Tanks and Containers, ANSI/AWS F4.1, Recommended Safe Practices for the Preparation for Welding and Cutting of Containers That Have Held Hazardous Substances, and applicable health and safety plan requirements.	

HAND AND POWER TOOL SAFETY
29 CFR 1926 Subpart I. EM 385-1-1, Section 13

YES	NO		COMMENT
☐	☐	Power tools are from a manufacturer listed by a nationally recognized testing laboratory for the specific application for which they are to be used.	
☐	☐	Hand & power tools are inspected, maintained, tested and determined to be in safe operating condition before use.	
☐	☐	Tools found to be unsafe are not used, tagged and repaired or destroyed.	
☐	☐	Users of tools are trained in safe use.	
☐	☐	Electrical tools have cords and plug connections in good repair.	
☐	☐	Electrical tools are effectively grounded or approved double insulated.	
☐	☐	Reciprocating, rotating, and moving parts of equipment are guarded if they may be accessed by employees or they otherwise create a hazard.	
☐	☐	Safety clips/retainers are installed and maintained on pneumatic impact tool connections.	
☐	☐	Chain saws have an automatic chain brake or anti-kickback device.	
☐	☐	Pneumatic and hydraulic hoses and fittings are inspected regularly.	
☐	☐	Employees who operate powder actuated tools are trained and carry valid operators cards.	
☐	☐	Powder activated tools are stored in individual locked containers, when not in use and are not loaded until ready to use.	
☐	☐	Powder actuated tools are inspected for obstructions or defects daily before use.	
☐	☐	Powder actuated tool operators have appropriate PPE.	

RIGGING
29 CFR 1926 Subpart H. EM 385-1-1, Section 15

YES	NO		COMMENT
☐	☐	Rigging equipment is inspected as specified by the manufacturer, by a qualified person, before use on each shift and as necessary to assure that it is safe.	
☐	☐	Defective equipment is removed from service.	
☐	☐	Rigging not in use is removed from the work area, properly stored, and maintained in good condition.	
☐	☐	Wire rope removed from service for defects is cut up or plainly marked as unfit for use as rigging.	
☐	☐	The number of saddle clips used to form eyes in wire rope conforms with Table H-20, are spaced evenly and the saddles are on the live side.	
☐	☐	Chain rigging has a tag clearly indicating load limits, is inspected before initial use, then weekly, and is of alloyed metal.	
☐	☐	Fiber rope rigging is not used if it is frozen or has been subject to acids or excessive heat.	
☐	☐	Slings and their fittings and fastenings are inspected before use on each shift and as needed during use.	
☐	☐	Drums, sheaves, and pulleys on rigging hardware are smooth and free of surface defects that can damage rigging.	

MATERIAL HANDLING, STORAGE, AND DISPOSAL
29 CFR 1926 Subpart H. EM 385-1-1, Section 14

YES	NO		COMMENT
☐	☐	Employees are trained in and use safe lifting techniques.	
☐	☐	Materials are not moved or suspended over workers unless positive precautions have been taken to protect workers.	
☐	☐	Conveyors are constructed, inspected, & maintained by qualified persons according to manufacturer's recommendations.	
☐	☐	All conveyors are to be equipped with emergency stopping devices.	
☐	☐	Hazardous exposed moving machine parts are guarded mechanically, electrically or by location.	
☐	☐	Controls are clearly marked and/or labeled to indicate the function controlled.	
☐	☐	Taglines are used for suspended loads where the movement may be hazardous to persons.	
☐	☐	Material in storage is protected from falling or collapse by effective stacking, blocking, cribbing, etc.	
☐	☐	Walkways and aisles are to be kept clear.	
☐	☐	Materials are not stored on scaffolds or runways in excess of normal placement or in excess of safe load limits.	
☐	☐	Work areas and means of access are maintained safe and orderly.	
☐	☐	Tools, materials, extension cords, hoses or debris do not cause tripping or other hazards.	
☐	☐	Storage and construction sites are kept free from the accumulation of combustible materials.	
☐	☐	Waste materials and rubbish are placed in containers or, if appropriate, in piles. Waste materials are disposed of in accord with applicable local, state, or federal requirements.	

FLOATING PLANT AND MARINE ACTIVITIES
29 CFR 1926 Subpart O. EM 385-1-1 Section 19

YES	NO		COMMENT
☐	☐	Floating plants that are regulated by the USCG have current inspections and certificates.	
☐	☐	Before any floating plant is brought to the job site and placed in service it is inspected and determined to be in safe operating condition	
☐	☐	Periodic inspections are made such that safe operating conditions are maintained. Strict compliance with EM 385-1-1, Section 19 is expected.	
☐	☐	Plans are in place for removing or securing the plant and evacuation of personnel endangered by severe weather and other marine emergencies such as; fire, flooding, man overboard, hazardous materials incidents, etc..	
☐	☐	Means of access are properly secured, guarded, and maintained free of slipping and tripping hazards.	
☐	☐	Dredging operations follow guidelines as established in EM 385-1-1, Section 19.D.	

PRESSURIZED EQUIPMENT AND SYSTEMS
29 CFR 1926 Subparts I, F. EM 385-1-1, Section 20

YES	NO		COMMENT
☐	☐	Pressurized equipment and systems are inspected before being placed into service.	
☐	☐	Pressurized equipment or systems found to be unsafe are tagged “Out of Service-Do Not Use”.	
☐	☐	Systems and equipment are operated, inspected and maintained by qualified, designated personnel.	
☐	☐	Safe clearance, lockout/tagout procedures are followed as appropriate during maintenance or repair.	
☐	☐	Air hose, pipes, fittings are pressure-rated for the activity. Defective hoses are removed from service.	
☐	☐	Hoses aren’t laid over ladders, steps, scaffolds, or walkways in a manner that creates a tripping hazard.	
☐	☐	The use of compressed air for personal cleaning is prohibited. The use of compressed air for other cleaning is restricted to less than 30 psig.	
☐	☐	Compressed gas cylinders are stored in well-ventilated locations.	
☐	☐	Cylinders in storage are separated from flammable or combustible liquids and from easily ignitable materials by at least 40 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Stored cylinders containing oxidizing gases are separated from fuel gas cylinders by at least 20 feet or by a minimum five feet tall, ½ -hour fire resistive partition.	
☐	☐	Cylinder valve caps are in place when cylinders are in storage, in transit, or a regulator is not in place.	
☐	☐	Compressed gas cylinders in service are secured in substantial fixed or portable racks or hand trucks.	
☐	☐	Oxygen cylinders and fittings are kept away from, and free from oil and grease.	
☐	☐	Cylinder Storage areas are posted with the names of the gases in storage and with signs indicating "No Smoking or Open Flame".	
☐	☐	Cylinders are to be stored such that mechanical and corriosion damage is avoided. Cylinders are not to be stored in areas required as an egress path.	
☐	☐	Cylinders may be stored in the open outdoors, however, they must be protected from the ground to prevent corrosion and must be protected from temperatures that may exceed 125 degrees F.	

WORK PLATFORMS/SCAFFOLDS
29 CFR 1926 Subparts L, M, N. EM 385-1-1 Sections 21, 22

YES	NO		COMMENT
☐	☐	Work platforms are erected, used, inspected, tested, maintained and repaired according to manufacturer's requirements.	
☐	☐	Construction, inspection, and disassembly of scaffolds is under the direction of a competent person.	
☐	☐	Workers on scaffolding have been trained by a qualified person.	
☐	☐	Scaffolds are erected on a firm and level surface and are square and plumb.	
☐	☐	Scaffolds are not loaded in excess of rated capacity.	
☐	☐	Working levels of work platforms are fully planked or decked.	
☐	☐	Planks are in good condition and free from obvious defects.	
☐	☐	Fabricated frame scaffolding four times higher than the base width is secured to building/structure according to manufacturer's instruction and/or OSHA requirements.	
☐	☐	Working platforms of scaffolding over ten feet in height have guard rails meeting OSHA specifications. Fall protection is suggested at four feet or greater.	
☐	☐	Scaffolding/work platforms are accessed by means of a properly secured ladder or equivalent. Built on ladders conform to scaffold ladder requirements. Climbing of braces is not allowed.	
☐	☐	Crane supported work platforms are designed and used in accordance with OSHA standards.	
☐	☐	Elevating work platforms are operated, inspected and maintained according to the equipment operations manual.	
☐	☐	Employees working in aerial lifts remain firmly on the floor of the basket. Employees use fall protection while in an aerial lift basket.	

WALKING AND WORKING SURFACES AND STAIRS
29 CFR 1926 Subparts L, M, X. EM 385-1-1, Sections 21, 22, 24

YES	NO		COMMENT
☐	☐	Work areas are clean, sanitary, and orderly	
☐	☐	Work surfaces are kept dry or appropriate means are taken to assure the surfaces are slip-resistant	
☐	☐	Accumulations of combustible dust are routinely removed.	
☐	☐	Aisles and passageways are kept clear and marked as appropriate.	
☐	☐	There is safe clearance for walking in aisles where motorized or mechanical handling equipment is operating.	
☐	☐	Materials or equipment is stored in such a way that sharp projections will not interfere with the walkway.	
☐	☐	Changes of direction or elevation are readily identifiable.	
☐	☐	Aisles or walkways that pass near moving or operating machinery, welding operations or similar operations are arranged so employees will not be subjected to potential hazards.	
☐	☐	Standard guardrails are provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground and bridges provided where workers must cross over conveyors and similar hazards.	
☐	☐	There are standard stair rails or handrails on all stairways having four or more risers or with an elevation of 30 or more inches.	
☐	☐	Stairways are at least 22 inches wide. (General Industry Standard)	

☐	☐	Stairs angle no more than 50 and no less than 30 degrees, risers are uniform from top to bottom (plus or minus 1/4 inch) and are provided with a surface that renders them slip resistant.	
☐	☐	Stairway handrails are not less than 36 inches above the leading edge of stair treads and have at least 3 inches of clearance between the handrails and the wall or surface they are mounted on.	
☐	☐	Where doors or gates open directly on a stairway, there is a platform provided so the swing of the door does not reduce the width of the platform to less than 20 inches.	
☐	☐	Where stairs or stairways exit directly into any area where vehicles may be operated, there are adequate barriers and warnings provided to prevent employees stepping into the path of traffic.	
☐	☐	Signs are posted showing the load capacity of elevated storage areas.	
☐	☐	An appropriate means of access and egress is provided for surfaces with 19 or more inches of elevation change.	
		Material on elevated surfaces is minimized, with that necessary for immediate work requriements piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading.	

FLOOR AND WALL HOLES AND OPENINGS
29 CFR 1926 Subpart M. EM 385-1-1, Section 24

YES	NO		COMMENT
☐	☐	Floor and roof openings that persons can walk into or fall through are guarded by a physical barrier or covered.	
☐	☐	Holes (defined as equal to or greater than 2 inches in least dimension) where person could trip must be covered/protected.	
☐	☐	Unprotected sides and edges on a walking/working surface six feet or more (note four feet in General Industry) are protected by guardrail system, safety net or Personal Fall Arrest System (PFAS).	
☐	☐	Unused portions of service pits and pits not actually in use are either covered or protected by guardrails or equivalent.	
☐	☐	Coverings for holes or other openings must be constructed of sufficient strength to support any anticipated load, must be secured in place to prevent accidental removal or displacement and must be marked indicating purpose (e.g., stenciled "Hole" or painted contrasting color to surroundings).	

LADDERS
29 CFR 1926 Subpart X. EM 385-1-1, Section 21

YES	NO		COMMENT
☐	☐	Portable ladders are used for their designed purpose only.	
☐	☐	Portable ladders are examined for defects prior to, and after use.	
☐	☐	Ladders found to be defective are clearly tagged to indicate "DO NOT USE" if repairable, or destroyed immediately if no repair is possible.	
☐	☐	Workers are trained in hazards associated with ladder use and how to inspect ladders.	
☐	☐	Ladders have secure footing provided by a combination of safety feet, top of ladder tie-offs and mud cills or a person holding the ladder to prevent slipping.	
☐	☐	The handrails of a straight ladder used to get from one level to another extend at least 36 inches above the landing.	
☐	☐	Ladders conform to construction criteria of ANSI Standards A-14.1 and A-14.2.	
☐	☐	Wooden ladders are not painted with an opaque covering such that signs of flaws, cracks or drying are obscured.	
☐	☐	Fixed ladders are constructed and used according to OSHA Standards, 29 CFR 1910.27 and ANSI A-14.3.	
☐	☐	Rungs, cleats or steps, and side rails that may be used for handholds when climbing, offer adequate gripping surface and are free of splinters, slivers or burrs, and substances that could cause slipping.	
☐	☐	Fixed ladders of greater than 24 feet have cages or other approved fall protection devices. (note General Industry is 20 feet).	
☐	☐	Where fall protection is provided by ladder safety systems (body belts or harnesses, lanyards and braking devices with safety lines or rails), systems meet the requirements of and are used in accordance with WESTON Fall Protection Standard Practices and are compatible with construction of the ladder system.	

DEMOLITION
29 CFR 1926 Subpart T. EM 385-1-1, Section 23

YES	NO		COMMENT
☐	☐	Prior to initiating demolition activities an engineering survey (by a competent person) and a demolition plan (by a competent person) is completed.	
☐	☐	All employees engaged in demolition activities are instructed in the demolition plan.	
☐	☐	It has been determined through the engineering survey and outlined in the plan, if any hazardous materials, or conditions (e.g., asbestos, lead, utility connections, etc.) exist. Such hazards are controlled or eliminated before demolition is started.	
☐	☐	Continued inspections, by a competent person, are conducted to ensure safe employee working conditions.	

TREE MAINTENANCE AND REMOVAL
29 CFR 1910 Subpart R. EM 385-1-1, Section 31

YES	NO		COMMENT
☐	☐	Tree maintenance or removal is done is under the direction of a qualified person.	
☐	☐	Tree work, in the vicinity of charged electric lines, is by trained persons qualified to work with electricity and tree work. Appropriate distances are maintained for all workers who are not qualified.	
☐	☐	Equipment is inspected, maintained, repaired and used in accordance with the manufacture's directions.	
☐	☐	Prior to felling actions are planned to include clearing of the area to permit safe working conditions and escape.	
☐	☐	Employees must be trained in the safe operation of all equipment.	

☐	☐	All equipment and machinery is inspected and determined safe prior to use.	
☐	☐	Work is performed under requirements of FLD 43.	

BLASTING
29 CFR 1926 Subpart U. EM 385-1-1, Section 29

YES	NO		COMMENT
☐	☐	A blasting safety plan is developed prior to bringing explosives on-site.	
☐	☐	The transportation, handling, storage, and use of explosives, blasting agents, and blasting equipment must be directed and supervised by a person with proven experience and ability in blasting operations. Licensing of person is verified.	
☐	☐	Blasting operations in or adjacent to cofferdams, piers, underwater structures, buildings, structures, or other facilities must be carefully planned with full consideration to potential vibration and damage.	

HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE AND UNDERGROUND STORAGE TANK (UST) ACTIVITIES
29 CFR 1926 Subpart D. EM 385-1-1, Section 28

YES	NO		COMMENT
☐	☐	All construction activities performed with known or potential exposure to hazardous waste are conducted in accordance with Hazardous Waste Operations and Emergency Response requirements.	

CONCRETE and MASONRY CONSTRUCTION
29 CFR 1926 Subpart Q. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Construction loads are not placed on a concrete or masonry structure or portion of a concrete or masonry structure unless the employer determines, based on information from a person who is qualified in structural design, that the structure or portion of the structure is capable of supporting the loads.	
☐	☐	Employees are not permitted to work above or in positions exposed to protruding reinforcing steel or other impalement hazards unless provisions have been made to control the hazard.	
☐	☐	Sections of concrete conveyances and airlines under pressure are secured with wire rope (or equivalent material) in addition to the regular couplings or connections.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures is supported and/or guyed to prevent overturning or collapse	
☐	☐	All form-work, shoring, and bracing is designed, fabricated, erected, supported, braced, and maintained so it will safely support all vertical and lateral loads that may be applied until the loads can be supported by the structure.	
☐	☐	Shoring equipment is inspected prior to erection to determine that it is specified in the shoring design. Any equipment found to be damaged is not used.	
☐	☐	Erected shoring equipment is inspected immediately prior to, during, and immediately after the placement of concrete. Any shoring equipment that is found to be damaged, displaced, or weakened is immediately reinforced or re-shored.	
☐	☐	Shoring, vertical slip forms and jacks conform with requirements of Section 27.B.08-13 of USACE EM 385-1-1.	
☐	☐	Forms and shores (except those on slab or grade and slip forms) are not removed until the individual responsible for forming and/or shoring determines that the concrete has gained sufficient strength to support its weight and all superimposed loads.	
☐	☐	Precast concrete members are adequately supported to prevent overturning or collapse until permanent connections are complete	
☐	☐	No one is permitted under pre-cast concrete members being lifted or tilted into position except employees required for the erection of those members.	
☐	☐	Lift slab operations are planned and designed by a registered engineer or architect.	
☐	☐	Hydraulic jacks used in lift slab construction have a safety device that causes the jacks to support the load in any position if the	

		jack malfunctions	
☐	☐	No one is permitted under the slab during jacking operations.	
☐	☐	A limited access zone is established whenever a masonry wall is being constructed.	
☐	☐	Fall protection is provided to masonry workers exposed to falls of 6 feet or more.	

STEEL ERECTION
29 CFR 1926 Subpart R. EM 385-1-1, Section 27

YES	NO		COMMENT
☐	☐	Impact wrenches have a locking device for retaining the socket. Containers shall be provided for storing or carrying rivets, bolts, and drift pins, and secured against accidental displacement when aloft.	
☐	☐	Structural and reinforcing steel for walls, piers, columns, and similar vertical structures shall be guyed and supported to prevent collapse	
☐	☐	No loading is placed upon steel joists until all bridging is completely and permanently installed**.**	
☐	☐	Workers are provided fall protection whenever they are exposed to falls of 1.8 m (6 ft) or more (EM 385-1-1).	
☐	☐	Temporary flooring in skeleton steel erection conforms with Section 27.F of USACE 385-1-1	

ROOFING
29 CFR 1926 Subpart M. EM 385-1-1, Sections 21, 22, 24, 27

Yes	No		Comments
☐	☐	In the construction, maintenance, repair, and demolition, of roofs, fall protection systems is provided that will prevent personnel from slipping and failing from the roof and prevent personnel on lower levels from being struck by falling objects	
☐	☐	On all roofs greater than 4.8 m (16 ft) in height, a hoisting device, stairways, or progressive platforms are furnished for supplying materials and equipment.	
☐	☐	Roofing materials and accessories that could be moved by the wind, including metal roofing panels, that are on the roof and unattached are secured when wind speeds are greater than, or are anticipated to exceed, 10 mph.	
☐	☐	Level, guarded platforms are provided at the landing area on the roof**.**	
☐	☐	When their use is permitted, warning line systems comply with USACE Section 27.07 of EM 385-1-1.	
☐	☐	Workers involved in roof-edge materials handling or working in a storage area located on a roof with a slope -/= to four vertical to twelve horizontal and with edges 6 ft or more above lower levels are protected by the use of a guardrail, safety net, or personal fall arrest system along all unprotected roof sides and edges of the area.	

ENVIRONMENTAL COMPLIANCE

Yes	No		Comments
☐	☐	Environmental Compliance and Waste Management Plan on file.	
☐	☐	Waste Determination Made.	
☐	☐	Manifest and/or Shipping Papers prepared and filed.	
☐	☐	Manifest Exception Reports Prepared, as necessary. Procedures to track manifests in place.	
☐	☐	State Annual and EPA Biennial Reporting Information Available.	
☐	☐	RCRA Personnel Training Records on file.	
☐	☐	CAA Permits on file.	
☐	☐	CWA Permits on file.	
☐	☐	RCRA Permits on file.	
☐	☐	State and/or Local Permits on file.	
☐	☐	RCRA Inspections conducted and Documentation on file.	
☐	☐	Transporter and TSD compliance information on file.	
☐	☐	Waste Accumulation Areas Managed Properly.	
☐	☐	Wetlands Areas Identified and Protected.	
☐	☐	Endangered, Threatened or Special Concern Species or Areas Identified and Protective Methods Determined.	
☐	☐	Runon and Runoff Concerns Identified and Managed.	
☐	☐	Adjacent Land Areas Protected as Necessary.	
☐	☐	Non-Hazardous Solid Wastes Managed Properly.	

MISCELLANEOUS REGULATORY and POLICY COMPLIANCE

Yes	No		Comments
☐	☐	Personnel Training Records for DOT Materials Handling on file.	
☐	☐	Noise Control Issues Addressed and Managed.	
☐	☐	Site Security Issues Identified and Managed.	
☐	☐	Known Historical, Archeological and Cultural Resources Identified and Managed.	
☐	☐	WESTON EHS Analysis Checklist In Use.	
☐	☐	Safety Observation and Recognition Program in place.	
☐	☐	Weekly EHS Report Card System in place.	
☐	☐	Federal, State and Local Required Postings in place.	
☐	☐	Site specific Lockout/Tagout Program is in place.	

☐	☐	Site-specific Confined Space Program is in place.	
☐	☐	Site Safety Officer filing system is in place and up to date.	

7.2 HEALTH AND SAFETY PLAN APPROVAL/SIGNOFF FORM

Site Name: Westover Landfill	**WO#:** 20405.012.001.1376.00
Address: 820 Otter Creek Rd., Oregon, Ohio	

I understand, agree to, and will conform with the information set forth in this Health and Safety Plan (and attachments) and discussed in the personnel health and safety briefing(s).

Name	Signature	Date
TJ McFarland		5/4/11
Ryan Green		5/31/2011